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THE
ZOOLOGICAL RECORD

VOLUME THE SEVENTY-NINTH

BEING

RECORDS OF ZOOLOGICAL LITERATURE

RELATING CHIEFLY TO THE YEAR

1942

COMPILED FOR THE ZOOLOGICAL SOCIETY OF LONDON BY

A. G. BRIGHTON, E. BROWNING, M. BURTON, A. B. HASTINGS, C. A. HOARE,
W. NICOLL, A. E. SALISBURY, J. K. S. ST. JOSEPH, W. L. SCLATER, M. A.
SMITH, C. J. STUBBLEFIELD, H. DIGHTON THOMAS, AND THE IMPERIAL
INSTITUTE OF ENTOMOLOGY.

EDITED BY

MALCOLM SMITH

Explorate solum : sic fit via certior ultra.

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PREFACE.

THIS Volume, the seventy-ninth, of the Zoological Record, deals mainly with the publications of 1942, but includes also those which, for various reasons, were not recorded in previous Volumes.

Articles in non-European languages, unless they are accompanied by an abstract in a European language, are not included. Articles and books which have not yet reached this country, but concerning which knowledge has been obtained from other sources, are recorded as far as the information permits. They will, if necessary, be dealt with more fully when they can be seen by the Recorders.

The Sections on Protochordata and Pisces are not included in this Volume, the former because there was nothing to record, the latter through the sudden illness of the Recorder.

The War has not had any appreciable effect upon the amount of zoological literature published in the last year. The total number of articles and books dealt with in this Volume is 7,767, a decrease of 632 over that of last year. The Section on Pisces, however, if included would more than compensate for the loss.

MALCOLM SMITH,
Editor.

Papers and Memoirs intended for this work should be addressed to "The Editor, Zoological Record, British Museum (Natural History), Cromwell Road, London, S.W.7." It is earnestly requested that in the case of separately printed copies of papers so forwarded the original pagination be indicated.

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I. COMPREHENSIVE ZOOLOGY

ARRANGED BY

W. L. SCLATER, M.A.

This section includes works that deal with more than one branch of Zoology, or that are of general interest to Zoologists. It is, therefore, not complete in itself as regards any one subject included in it. The special records complete each subject. A few memoirs included in the special records are repeated in this division as well as the literature on the Genetics of *Drosophila* and some other insects used as a vehicle for these special researches.

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2. PROTOZOA

ARRANGED BY

CECIL A. HOARE, D.Sc.

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†*Proteonina jolietensis* sp. n., *P. acuta* sp. n., *P. ovata* sp. n., Silurian, Mississippi Basin, DUNN 207.

†*Psammosphaera ? greenlandensis* sp. n., Lower Cambrian, E. Greenland, HOWELL & DUNN 302.—†*P. arcuata* sp. n., *P. conjunctiva* sp. n., *P. excerpta* sp. n., *P. gigantea* sp. n., *P. minuta* sp. n., *P. subsphaerica* sp. n., Silurian, Mississippi Basin, DUNN 207.

†*Pseudarcella patella* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.

†*Pseudastrophiza irregularis* sp. n., *P. regularis* sp. n., Silurian, Mississippi Basin, DUNN 207.

†*Pseudochrysalidina* gen. n. *floridana* sp. n., Eocene, Florida, COLE 137.

†*Pseudogaudryinella colombiana* sp. n., Cretaceous, Colombia, CUSHMAN & HEDBERG 170.

†*Pseudoglandulina acuta* sp. n., Tertiary, Dutch East Indies, LE ROY 388.—†*P. clarkei* sp. n., Eocene, W. Australia, PARR 493.

†*Pseudononion papillatum* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.

†*Pseudoschwagerina montanensis* sp. n., Permian, Montana, FRENZEL & MUNDORFF 233.

†*Pseudostaffella* gen. n. *needhami* sp. n. (type), Pennsylvanian, U.S.A., THOMPSON 642.

†*Pseudovigerina naeolensis* sp. n., Eocene, Alabama, CUSHMAN & TODD 178.

†*Pullenia malkinae* sp. n., Pliocene, Panama, CORYELL & MOSSMAN 150

†*Pulvinulinella obtusa* var. n. *westraliensis*, Eocene, W. Australia, PARR 493.

†*Quinqueloculina plummerae* sp. n., Eocene, Alabama, CUSHMAN & TODD 178.—†*Q. apiculata* sp. n., *Q. audacula* sp. n., *Q. maculata* sp. n., *Q. ponciana* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.—†*Q. reticulata* var. n. *elongata*, Tertiary, Dutch East Indies, Le ROY 388.

†*Reichelina* gen. n. *cribroseptata* sp. n. (type), *R. minuta* sp. n., Permian, Turkey, ERK 213.

†*Robulus multi-marginatus* sp. n., *R. sutura-rectus* sp. n., Tertiary, Dutch East Indies, Le ROY 388.—†*R. cibaoensis* sp. n., *R. planulus* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.—†*R. cushmani* var. n. *procedendus*, Pliocene, Panama, CORYELL & MOSSMAN 150.

†*Rotalia meyerhoffi* sp. n., *R. tholus* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.—†*R. equatoriana* sp. n., *R. marginospinosa* sp. n., Tertiary, Dutch East Indies, Le ROY 388.—†*R. sp. n.* (aff. *clathrata* Brady) Tertiary, New Zealand, BROWN 93.

†*Rupertia verrucosa* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.

†*Schwagerina pavilionensis* sp. n., *S. p. var. n. acris*, Permian, Brit. Columbia, THOMPSON & WHEELER 643.—†*S. globulariformis* sp. n., *S. wanneri* var. n. *sutchanica*, Permian, Caucasus, LICHAREW 392.

†*Shidelerella* gen. n. *bicuspidata* sp. n. (type), *S. cylindrica* sp. n., *S. elongata* sp. n., Silurian, Mississippi Basin, DUNN 207.

Sigmoilina latissima sp. n., S.E. coast of Australia, CHAPMAN 119.

†*Sigmomorphina soldadoensis* sp. n., Eocene, Trinidad, CUSHMAN & RENZ 175.

†*Siphogenerina indica* sp. n., Tertiary Dutch East Indies, Le ROY 388.—†*S. costostriata* sp. n., *S. cummingsi* sp. n., *S. hubbardi* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.

†*Sorosphaera bicella* sp. n., *S. multicella* sp. n., *S. subconfusa* sp. n., Silurian Mississippi Basin, DUNN 207.

†*Spirillina obdusa* sp. n., Mississippian, Illinois, CORYELL & ROZANSKI 151.

†*Spirolina coryensis* sp. n., Eocene, Florida, COLE 137.

†*Spiroloculina oculina* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.

†*Spiroplectamina marginocuta* sp. n., Tertiary, Dutch East Indies, Le ROY 388.

†*Stegnammina cylindrica* var. n. *brevis*, Silurian, Mississippi Basin, DUNN 207.

†*Stensioina labyrinthica* sp. n. (Galiccia); *S. americana* sp. n. (Texas), Upper Cretaceous, CUSHMAN & DORSEY 166.

†*Sumatrina ussurica* sp. n., Permian, Siberia, LICHAREW 392.

†*Textularia coryensis* sp. n., Eocene, Florida, COLE 137.—†*T. indenta* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.

†*Thekammina* gen. n. *quadrangularis* sp. n. (type), *T. moremani* sp. n., Silurian, Mississippi Basin, DUNN 207.

Thekammininae subf. n., DUNN 207.

†*Thelosina* ? *dubia* sp. n., Silurian, Mississippi Basin, DUNN 207.

†*Thurammina coronata* sp. n., *T. echinata* sp. n., *T. foerstei* sp. n., *T. hexagona* sp. n., *T. ? hexactinellida* sp. n., *T. inflata* sp. n., *T. jubata* sp. n., *T. limbata* sp. n., *T. l. var. n. disciformis*, *T. magna* sp. n., *T. melleni* sp. n., *T. parvituba* sp. n., *T. ? seminaformis* sp. n., *T. slocomi* sp. n., *T. splendens* sp. n., *T. stelliformis* sp. n., *T. tributa* sp. n., *T. quadrata* sp. n., *T. quadrirubulata* sp. n., Silurian, Mississippi Basin, DUNN 207.

†*Tinoporos bacculatus* var. n. *sphaericus*, Tertiary, Dutch East Indies, Le ROY 388.

†*Tolypammina tortuosa* sp. n., Silurian, Mississippi Basin, DUNN 207.

†*Trifarina herberti* sp. n., Eocene, Trinidad, CUSHMAN & RENZ 175.

†*Triloculina cervicula* sp. n., *T. elliptica* sp. n., *T. longissima* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.

†*Triticites burgessae* sp. n., *T. collus* sp. n., *T. caccus* sp. n., *T. newelli* sp. n., Carboniferous, U.S.A., BURMA 100.

†*Trochammina praesquamata* sp. n., Jurassic, Siberia, MJATLIUK 445.

†*Trochaminoides approximatus* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.

†*Turritellevella fisheri* sp. n., *T. workmani* sp. n., *T. osgoodensis* sp. n., Silurian, Mississippi Basin, DUNN 207.

†*Uvigerina bulbacea* sp. n., *U. fusiformis* sp. n., *U. mexicana* var. n. *bulbosa*, *ranunculus*, *U. postica* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.—†*U. gallowayi* sp. n., *U. buricensis* sp. n., *U. striata* var. n. *attenuata*, Pliocene, Panama, CORYELL & MOSSMAN 150.

Vaginulina texana var. n. *suturocostata*, Cretaceous, Arkansas, CUSHMAN & DEADERICK 165.—†*V. barcoensis* sp. n. Cretaceous, Colombia, CUSHMAN & HEDBERG 170.—†*V. faba* sp. n., *V. siliquoidea* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.

†*Valvulammina cornucopia* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.

†*Valvulina floridana* sp. n., Eocene, Florida, COLE 137.

†*Valvulineria maclureaformis* sp. n., Tertiary, Porto Rico, GALLOWAY & HEMINWAY 239.—†*V. johnsoni* sp. n., *V. scintillans* sp. n., *V. s.* var. n. *sinecarina*, Pliocene, Panama, CORYELL & MOSSMAN 150.

†*Verneuilina sibirica* sp. n., Jurassic, Nordvik Peninsula, Siberia, MJATLIUK 445.

Virgulininae in Allan Hancock collection, CUSHMAN & McCULLOCH 172.

†*Waeringella* gen. n. *spiveyi* sp. n. (type), Pennsylvanian, U.S.A., THOMPSON 642.

†*Yabeina minuta* sp. n., Permian, Brit. Columbia, THOMPSON & WHEELER 643.

(d) Heliozoa.

[Vacant.]

(e) Radiolaria.

[Vacant.]

3.—MASTIGOPHORA.

A. PHYTOMASTIGINA.

(a) Chrysomonadina.

[Vacant.]

(b) Cryptomonadina.

[Vacant.]

(c) Dinoflagellata.

[Vacant.]

(d) Euglenoidida.

Akanthopeltis sectio nova of *Phacus*, POCHMANN 509.

Astasia aplanata sp. n., *A. clava* sp. n., *A. comma* sp. n., *A. cylindrica* sp. n., *A. dangeardii* var. n. *parva*, *A. fustis* sp. n., *A. gomphonema* sp. n., *A. granulata* sp. n., *A. harrisii* sp. n., *A. parva* sp. n., *A. torta* sp. n., *A. linealis* sp. n.; with key for identification of *Astasia* spp., PRINGSHEIM 515.

Chlorophacus subgen. n. of *Phacus*, POCHMANN 509.

Distigma gracilis sp. n., *D. sennii* sp. n., PRINGSHEIM 515.

Hyalophacus subgen. n. of *Phacus*, POCHMANN 509.

Kampylopter sectio nova of *Phacus*, POCHMANN 509.

Menoidium cultellus sp. n., *M. obtusum* sp. n., *M. bibacillatum* sp. n., PRINGSHEIM 515.

Phacus: revision of genus, with key to spp.; *P. corculum*, *P. nannos*, *P. pygmaeus*, *P. polytrophos*, *P. cylindrus*, *P. gracilis*, *P. ichthydion*, *P. inflexus*, spp. n., *P. aenigmaticus* var. n. *monochloron*, *P. filicauda*, *P. ventriosus* spp. n., *P. acuminatus americana* subsp. n., *P. a. javana* subsp. n., *P. a. discifera* subsp. n., *P. a. variabilis* subsp. n., *P. a. triquetra* subsp. n., *P. a. acuticauda* subsp. n., *P. a. granulata* subsp. n., *P. a. megapyrenoidea* subsp. n., *P. a. indica* subsp. n., *P. brachykentron*, *P. ankylonoton*, *P. formosus*, *P. applanatus*, *P. obolus*, *P. pseudoplatalea*, *P. musculus*, *P. incrassatus*, *P. platyaulax*, *P. moraviensis*, *P. textus*, *P. macrostigma*, *P. angulatus*, *P. circulatus*, *P. minutus*, *P. hamatus*, *P. thrombus*, *P. carinatus*,

P. undulatus, *P. venustus*, *P. onyx*, *P. aspidion*, *P. unguis*, *P. cuneatus*, *P. meson*, *P. acutus*, *P. elegans* spp. n., *P. longicauda cordata* subsp. n., *P. l. rotunda* subsp. n., *P. l. attenuata* subsp. n., *P. l. maior* subsp. n., *P. l. insecta* subsp. n., *P. l. modagassica* subsp. n., *P. multiannulatus*, *P. circumflexus*, *P. ephippion* spp. n., *P. tortus* var. n. *roeckli*, *P. sesquitortus*, *P. helikoides*, *P. ranula*, *P. ostreatus*, *P. atraktoides*, *P. pseudonordstedti*, *P. minusculus*, *P. turgidulus*, *P. trypanon*, *P. globosus*, *P. splendens*, *P. ulula*, *P. rudicula*, *P. mirabilis*, *P. megalopsis*, *P. strongylus*, *P. lepocincloides*, *P. cochleatus*, *P. pomiformis*, *P. latus* spp. n., *P. suecicus* var. n. *oidion*, *P. margaritatus*, *P. glaber*, *P. hystrix*, *P. horridus*, *P. monilicostatus*, *P. persikon*, *P. pulcherrimus* spp. n., from various countries, POCHMANN 509.—*P. quinquemarginatus* sp. n. from pond in U.S.A., JAHN & SHAWHAN 315.

Pleuraspis sectio nova of Phacus, POCHMANN 509.

Proterophacus sectio nova of Phacus, POCHMANN 509.

Rhabdomonas spiralis sp. n., PRINGSHEIM 515.

(e) Phytomonadida.

[Vacant.]

B.—ZOOMASTIGINA.

(f) Protomonadida.

Aulomonas gen. n. *purdyi* sp. n. from Tennessee River, U.S.A., LACKEY 376.

Caduceia: revision with key to spp.; *C. bugnioni* sp. n. from *Neotermes greeni*, Ceylon; *C. monile* sp. n. from *N. tectonae*, Dutch E. Indies; *C. kalshoveni* sp. n. from *N. dalbergiae*, Java; *C. pruvoti* comb. n. (from *Devescovina pruvoti*), KIRBY, 355.

Devescovina: revision with key to spp.; *D. fissa* sp. n. from *Procryptotermes* sp., Réunion; *D. endicula* sp. n. from *Kalotermes jeannelanus*, E. Africa; *D. coghilli* sp. n. from *Cryptotermes merwei*, S. Africa; *D. insolita* sp. n. from *Neotermes* sp., Tanganyika; *D. robusta* sp. n. from *Neotermes erythraeus*, Eritrea; *D. parasoma* sp. n. from

N. tectonae, Dutch E. Indies; *D. vestita* sp. n. from *Glyptotermes niger*, Java; *D. exilis* sp. n. from *Neotermes connexus*, Hawaii; *D. lepida* sp. n. from *Calcaritermes brevicollis*, Panama; *D. arta* sp. n. from *Glyptotermes angustus*, Panama; *D. vittata* sp. n. from *Kalotermes* sp., Tanganyika; *D. uniflexura* sp. n. from *K. perezii*, Costa Rica; *D. hawaiiensis* (comb. n. for *D. striata* var. *hawaiiensis*); *D. transita* sp. n. from *Glyptotermes* sp., Java; *D. similis* sp. n. from *Cryptotermes* sp., Madagascar, KIRBY [No. 245 in Z.R. lxxviii].

Devescovininae: revision of genera *Devescovina*, *Caduceia* and *Macrotrichomonas*, with keys to their spp., KIRBY [No. 245 in Z.R. lxxviii] and 355.

Herpetomonas pessoai sp. n. from gut of *Anopheles* spp., Brazil, AYROSA GALVÃO & COUTINHO 35.—*H. leptocoridis* comb. n. for *Crithidia leptocoridis* McCulloch 1915, KAY 339.

Leishmania donovani: successful transmission of infection to man by the bites of sandflies, SWAMINATH, SHORTT & ANDERSON 623.

Leptomonas anophelini sp. n. from *Anopheles eiseni*, Brazil, FONSECA & FONSECA 228.

Macrotrichomonas: revision with key to spp.; *M. unguis* sp. n. from *Glyptotermes caudomunitis*, Java; *M. ramosa* sp. n. from *G. brevicaudatus*, Java; *M. restis* sp. n. from *Kalotermes jouteli*, Florida; *M. virgosa* sp. n. from *Procryptotermes* sp., Madagascar; *M. lighti* comb. n. (from *Gigantomonas lighti*); *M. procera* sp. n. from *Calcaritermes brevicollis*, Panama, KIRBY 355.

Polyflagellomonas gen. n. *genitalis* sp. n. from vagina of mare, CARPANO 110.

Stelaxomonas gen. n. *dichotoma* sp. n. from Tennessee River, U.S.A., LACKEY 376.

Trichomonas spp. of various mammals (including man), regarded as variants of the same organism, HEES 283.—*T.* in man: case for independent specific status of oral, intestinal and vaginal forms, STABLER & FEO 610, 611, 612.

Trypanosoma percae var. n. *canadensis* from *Perca flavescens*; *T. myoxocephali* sp. n. from *Myoxocephalus octodecimspinosus*; *T. lavalia* sp. n., *T.*

gaumontis sp. n., *T. montrealis* sp. n. from *Bufo americanus* Canada, FANTHAM, PORTER & RICHARDSON 217.

(g) Hypermastigida.

Calonympha avita sp. n. from *Cryptotermes*; *C. patella* sp. n. from *Neotermes*; *C. grandis* sp. n. from *Rugitermes*, U.S.A., BROWN 94.

(h) Diplomonadida.

[Vacant.]

(i) Polymonadida.

Holomastigotoides mitotica sp. n. from termite *Prorethinosia*, U.S.A., JENNINGS 321.

Pseudotrichonympha sp. n. [indet.] from termite *Prorethinosia*, U.S.A., BREINEN 85.

4.—SPOROZOA.

A. COCCIDIOMORPHA.

(a) Gregarinida.

[Vacant.]

(b) Coccidiida.

Eimeria antilocaprae sp. n. from American antelope *Antilocapra americana*, HUIZINGA 307.—*E. wyomingensis* sp. n. from Cattle, U.S.A., HUIZINGA & WINGER, 308.—*E. chrysemydis* sp. n., *E. delagei* var. n. *marginata* from turtle, *Chrysemys marginata*, U.S.A., DEEDS & JAHN 187.

Haemogregarina thamnophium sp. n. from snake, *Thamnophis*, Mexico, SOKOLOFF & MOOSER 597, 598.—*H. triatomae* sp. n. from S. American lizard, *Tupinambis teguixin*; transmitted by *Triatoma*, OSIMANI 486.—*H. myoxocephali* sp. n. from *Myoxocephalus octodecimspinosus*; *H. urophysis* sp. n. from *Urophysis tenuis*, Canada, FANTHAM, PORTER & RICHARDSON 217.

Isospora brumpti sp. n. from toad *Bufo viridis*, Syria, LAVIER 381.

Lankesterella canadensis sp. n. from *Rana catesbiana*, Canada, FANTHAM, PORTER & RICHARDSON 217.

(c) Haemosporidia.

Babesia foliata sp. n. from Indian sheep; also comparative morphology of ovine and caprine spp. of *Babesia*, RAY & RAGHAVACHARI 525.

Dactylosoma salvelini sp. n. from *Salvelinus fontinalis*; *D. sylvatica* sp. n. from *Rana sylvatica*—Canada, FANTHAM, PORTER & RICHARDSON 217.

Francaielliella caucasica: case for specific independence, SOUDATCHENKOV & TCHIGIE 606.

Haemoproteus laurentiae sp. n., *H. lavalia* sp. n., *H. lanoraiea* sp. n. from *Bufo americanus*, Canada, FANTHAM, PORTER & RICHARDSON 217.

Leucocytozoon salvelini sp. n. from *Salvelinus fontinalis*, Canada, FANTHAM, PORTER & RICHARDSON 217.

Plasmodium: differential diagnosis of human malaria parasites, WILCOX 692; WILCOX & LOGAN 693; taxonomy of spp. from man and American strains of malaria parasites, COATNEY & YOUNG, 133; Spp. from birds, new designation of strains, list showing names of original hosts, localities and dates of isolation, and references, HUFF, etc. 305; Russian terms for the parasites and various aspects of the infection, etc., in malaria, ANON. 2; *P. catesbiana* sp. n. from *Rana catesbiana*; *P. bufonis* sp. n. from *Bufo americanus*—Canada, FANTHAM, PORTER & RICHARDSON 217.

B. CNIDOSPORIDIA.

(d) Myxosporidia.

Chloromyxum opladeli sp. n., *C. thompsoni* sp. n., from gall bladder of N. American fishes, *Opladelus* and *Ictiobus* respectively, MEGLITSCH 436.

Myxosoma microthecum sp. n. from N. American fish, *Minytrema melanops*, MEGLITSCH 437.

(e) Microsporidia.

Duboscquia spp. compared, KUDO 372.

Plistophora kudoii sp. n. from cockroach, U.S.A., SPRAGUE & RAMSEY 608.

Stempellia moniezi sp. n. hyperparasite in cestodes parasitic in shrew, U.S.A., JONES 333.

Thelohania anomala sp. n. from
Anopheles (larvae), India, SEN 576.

C. cylindrica sp. n., *C. thalmanni* sp. n.,
Secondary, Balearic Islands, COLOM
140.

(f) **Actinomyxidida.**

[Vacant.]

(g) **Sarcosporidia.**

[Vacant.]

(h) **Haplosporidia.**

[Vacant.]

5.—CILIOPHORA.

A. OPALINATA.

Zelleriella bolivari sp. n. from toad
Bufo marmoreus, Mexico, BELTRAN 56.

Climacocylis balboana sp. n. from
coasts of Mexico, TAFALL 626.

Codonellopsis colombiana sp. n. from
coasts of Mexico, TAFALL 626.

Coxiella bolivari sp. n. from coasts
of Mexico, TAFALL 626.

Daturella beltrani sp. n. from coasts
of Mexico, TAFALL 626.

Favella mexicana sp. n. from coasts
of Mexico, TAFALL 626.—*F. simplex*
sp. n., *F. philippensis* sp. n., *F. elongata*
sp. n., Philippine coasts, ROXAS 547,
548.

†*Favelloides* gen. n. *balearica* sp. n.,
F. pseudoserrata sp. n., *F. majoricensis*
sp. n., Secondary, Balearic Islands,
COLOM 140.

Leprotintinnus tubulosus sp. n., Philip-
pine coasts, ROXAS 547, 548.

Luminella neo-californica sp. n. from
coasts of Mexico, TAFALL 626.

Metacylis hemisphaerica sp. n., *M.*
kofoidi sp. n., Philippine coasts, ROXAS
547, 548.

Petalotricha kofoidi sp. n. from coasts
of Mexico, TAFALL 626.

Rhabdonella fenestrata sp. n., Philip-
pine coasts, ROXAS 547, 548.—*R.*
spiroides sp. n. from coasts of Mexico,
TAFALL 626.

†*Rhabdonelloides* gen. n. *inesperatta*
sp. n., Secondary, Balearic Islands,
COLOM 140.

Stenosemella acapulcensis sp. n., *S.*
nicaraguensis sp. n. from coasts of
Mexico, TAFALL 626.

Tintinnidium cylindrica sp. n., *T.*
ampullarium sp. n., Philippine coasts,
ROXAS 547, 548.

Tintinnopsis bacoorensis sp. n., *T.*
bütschlii sp. n., *T. manilensis* sp. n.,
Philippine coasts, ROXAS 547, 548.—
T. campbelli sp. n. from coasts of Mexico,
TAFALL 626.

Xistonella americana sp. n. from coasts
of Mexico, TAFALL 626.

†*Calpionella longa* sp. n., *C.* doli-*
phormis sp. n., *C. simplex* sp. n., *C.*
undelloides sp. n., *C. hispanica* sp. n.,

(b) **Heterotrichida.**

Nyctotherus mackinnoni sp. n., from
intestine of fish, *Pimelodus clarias*, S.
America, SCHOUTEN 571.

Paranyctotherus gen. n. (nom. n. for
Balanitidium kirbyi Rodriguez, 1939)
parasitic in toad, *Xenopus laevis*, S.
Africa. SANDON 561.

(c) **Oligotrichida.**

(d) **Entodiniomorpha.**

[Vacant.]

(e) **Hypotrichida.**

[Vacant.]

(f) **Peritrichida.**

Epistylis telphusae sp. n., AWERIN-
ZEW 34.—*E. chrysemydis* sp. n., attached
to turtles, U.S.A., BISHOP & JAHN 66.

Lagenophrys tattersalli sp. n., ecto-
parasitic on amphipod *Gammarus mari-*
nus, Wales. WILLIS 696.

Trichodina spheroides sp. n., *T.*
halli sp. n., ectoparasitic on marine
fishes, Atlantic coast, U.S.A., PADNOS &
NIGRELLI 488.

C. SUCTORIA.

Trichophrya micropteri sp. n., ecto-
parasitic on gills of bass, *Micropterus*
dolomieu, U.S.A., DAVIS 186.

PROTISTA INCERTAE SEDIS.

Eperythrozoon felis sp. n. from
domestic cat, S. Africa, CLARK 131.

3. PORIFERA

BY

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4. COELENTERATA

ARRANGED BY

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Propora conferta p. 103 fig., *arctica* sp. n. pp. 103, 124 fig. Silurian Taimyr, TCHERNYCHEV Trans. arctic Inst. Leningrad 91 1937.

Protomichelinia a synonym of *Pleurodictyum* p. 14, *microstoma* p. 14 fig., SMITH 91.

Striatopora tebenjkovi sp. n. NOM. NUD. p. 137 Silurian Arctic Russia, TEBENKOV, GANTMAN & EYNOR Trans. arctic Inst. Leningrad 126 1939.—*S.* sp. p. 559 fig., STUMM 95.—*S. arctica* pp. 90, 118 fig. Silurian Novaya Zemlya, *mutabilis* pp. 90, 119 fig. Devonian Severnaya Zemlya, spp. n., TCHERNYCHEV Trans. arctic Inst. Leningrad 91 1937.—*S. tebenjkovi* sp. n. pp. 149, 152 fig. Silurian Russia, TCHERNYCHEV Trans. arctic Inst. Leningrad 101 1938.

Syringopora sibirica sp. n. NOM. NUD. p. 137 Silurian Arctic Russia, TEBENKOV, GANTMAN & EYNOR Trans. arctic Inst. Leningrad 126 1939.—*S. ramulosa* p. 13, *reticulata*, *gracilis*, *conferta* p. 14, GORSKY 32.—*S. parallela*, *geniculata* p. 188, HERITSCH 40.—*S. fascicularis* p. 91 fig., *petrenki* sp. n. pp. 92, 119 fig., Silurian Novaya Zemlya, *gorskyi* sp. n.

pp. 92, 119 fig. Silurian Novaya Zemlya, *schmidtii* sp. n. pp. 93, 120 fig. Silurian Novaya Zemlya, TCHERNYCHEV Trans. arctic Inst. Leningrad 91 1937.—*S. petrenki* p. 123, *schmidtii* p. 123 fig., *lindstromi* nom. n. (pro *fenestrata* Lindström non Winchell) pp. 124, 140 fig. Silurian Russia, *adzvaensis* sp. n. pp. 124, 140 fig. Silurian Russia, *volkenensis* sp. n. pp. 125, 140 fig. Devonian Russia, *khalaganensis* sp. n. pp. 126, 140 fig. Silurian or Devonian Russia, *spinosa* sp. n. pp. 127, 140 fig. Silurian Russia, TCHERNYCHEV Trans. arctic Inst. Leningrad 101 1938.—*S. sibirica* sp. n. pp. 150, 153 fig. Silurian Russia, TCHERNYCHEV Trans. arctic Inst. Leningrad 101 1938.

Tetradium borealis sp. n. pp. 132, 141 fig. Devonian Russia, TCHERNYCHEV Trans. arctic Inst. Leningrad 101 1938.

Thecia swindernana p. 32 fig., HADDING 37.

Trachypora limbata p. 559 fig., *elegantula* p. 559 fig., STUMM 95.

Yavorskia discussed pp. 15, 142, *borealis* sp. n. pp. 16, 143 fig. Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.

ZOANTHARIA.

†*Acanthophyllum* discussed p. 234, *sweeti* p. 235 fig., HILL 44.—*A.* sp. p. 14 fig., sp. or *Lyrielasma* sp. p. 14, sp. or *Dohmophyllum* sp. p. 14 fig., HILL 45.—*A. ? mansfieldense* p. 146 fig., HILL 46.—*A.* cf. *mansfieldense* p. 182 fig., *aequisetatum* p. 183 fig., HILL 47.

†*Acrophyllum* sp. n. pp. 555, 558 fig. Middle Devonian Ohio, STUMM J. Paleont. Menasha Wis. 16 5 1942.

Actinernus nobilis cnidae p. 21 fig., *antarcticus* cnidae p. 21, CARLGREN 10.

†*Actinocystis ? cornubovis* a *Mesophyllum* (q.v.) p. 150 fig., HILL 46.

Actinostephanus haekeli cnidae p. 34 fig., CARLGREN 10.

Actinostola callosa cnidae p. 37 fig., CARLGREN 10.

Actinothoe undata cnidae p. 40 fig., *viduata* cnidae p. 41 fig., *lacerata* cnidae p. 41 fig., CARLGREN 10.

†*Agaricid* sp. p. 98 fig., DURHAM 20.

Alicia costae cnidae p. 31 fig., CARLGREN 10.

†*Amandophyllum* gen. n. p. 136, *symmetricum* p. 137 fig., *myatshkovense* p. 137 fig., *carnicum* p. 137 fig., HERITSCH Cbl. Min. Geol. Paläont. Stuttgart B5 1941.

†*Amplexus* sp. p. 21 fig., GORSKY 32.—*A. hamiltonae* p. 558 fig., STUMM 95.

Andvakia parva sp. n. pp. 28, 60 fig. Sweden, CARLGREN Acta Univ. Lund. N.F. 36 3 1940.

Anemonia sulcata tentacles and nematocysts p. 296 fig., PANTIN 80.

†*Antiquastraea cellulosa* p. 54 fig., THOMAS 101.

Arachnanthus sarsii cnidae p. 13 fig., CARLGREN 10.

†*Archohelia weaveri* sp. n. p. 93 fig. Lower Oligocene Washington State, *clarki*? p. 94, DURHAM J. Paleont. Menasha Wis. 16 1 1942.

†*Astrangia clarki* sp. n. p. 95 fig. Lower Eocene Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.—*A. danae* p. 178 fig., *marylandica* p. 178, RICHARDS & HARBISON 85.—*A. coalingsensis* p. 38 fig., WOODRING, STEWART & RICHARDS 107.

†*Astreopora sanjuanensis* p. 505, DURHAM 19.—*A. duwamishensis* p. 101 fig. Upper Eocene, *sanjuanensis* p. 102 fig. Middle Eocene, sp. n. Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.

†*Astrocoenia dilloni* sp. n. p. 505 fig. M. Eocene California, DURHAM Proc. Calif. Acad. Sci. (4) 23 34 1942.—*A. guantanamoensis* p. 51 fig., *decatuensis* p. 52 fig., THOMAS 101.—*A. hyatti* sp. n. p. 1 fig. Jurassic Wyoming, WELLS Amer. Mus. Novit. 1161 1942.—*A. sp.* p. 126 fig., WELLS 106.

Astroides calycularis cnidae p. 45 fig., CARLGREN 10.

†*Aulacophyllum* discussed p. 159, *trizonatum* sp. n. p. 160 fig. Devonian New South Wales, HILL J. Proc. roy. Soc. N.S.W. 76 1942.—? *A. sp.* p. 187 fig., HILL 47.—*A. hemicrassatum* p. 559 fig., STUMM 95.

†*Auloclesia* discussed p. 79, *petrenkoi* pp. 80, 184 fig., *pauciseptatum* pp. 81, 185 fig., spp. n. Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.

Aureliana japonica sp. n. pp. 35, 60 Japan, CARLGREN Acta Univ. Lund. N.F. 36 3 1940.

†*Balanophyllia washingtonensis* p. 98 fig. Upper Eocene, *fulleri* p. 99 fig. Lower Oligocene, spp. n., *teglandae* nom. n. pro *blakeleyensis* p. 99 fig. ? Upper Oligocene, Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.

†*Blothrophyllum conatum* p. 558 fig., *cinctutum* p. 558 fig., STUMM 95.

Bolocera tuediae cnidae p. 32 fig., CARLGREN 10.

Boloceroides hermafroditica cnidae p. 29 fig., CARLGREN 10.

†*Bothrophyllum* discussed, synonymous with *Pseudocarinia* pp. 46, 164, *superbum* sp. n. pp. 47, 165 fig., *formosum* sp. n. pp. 49, 167 fig., *B. (?) sp.* p. 50 fig., Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.

Botrucnidifer norvegicus cnidae p. 14 fig., CARLGREN 10.

†*Bradyphyllum* discussed p. 258, HUDSON 50.

Bunodeopsis strumosa cnidae p. 29 fig., CARLGREN 10.

†*Calceola sandalina sandalina* p. 241 fig., *sandalina alta* p. 241 fig., HILL 44.—*C. sp.* p. 15 fig., HILL 45.

†*Campophyllum* aff. *amplexoides* pp. 59, 173 fig., var. *simplex* var. n. pp. 60, 174 fig. Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.—*C. gregorii* a species of *Disphyllum* p. 247 fig., HILL 44.—“*C.*” cf. *lindstromi* p. 148 fig., HILL 46.—*C. ? readi* sp. n. p. 380 fig. L. Carboniferous Oregon, MERRIAM J. Paleont. Menasha Wis. 16 3 1942.

†*Caninella* gen. n. pp. 40, 159, genotype (by author's original designation) *pulchra* sp. n. pp. 41, 160 fig., *eximia* sp. n. pp. 43, 161 fig., Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.

†*Caninia subbicina* p. 26 fig., cf. *volgensis* p. 27, cf. *simplex* p. 27 fig., aff. *juddi* pp. 28, 150 fig., *juddiformis* sp. n. pp. 30, 151 fig., *aberrans* sp. n. pp. 31, 153, sp. ex gr. *spumosa* pp. 34, 155 fig., *hyperborea* sp. n. pp. 35, 156 fig., *mutafii* sp. n. p. 37, 158 fig., sp. ind. p. 39, *C. ? sp. ind.* p. 40 fig., Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.

†*Carcinophyllum lonsdaleiforme* p. 92 fig., aff. *lonsdaleiforme* pp. 93, 193 fig., aff. *vaughani* pp. 94, 194 fig., *septentrionale* sp. n. pp. 96, 195 fig., var. *densa* var. n. pp. 99, 197 fig., aff. *septentrionale* pp. 98, 197 fig., sp. No. 1 p. 100 fig., *C.* (?) sp. p. 101, Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.

†*Carinthiaphyllum suessi* p. 275 fig., HERITSCH 41.

†*Caryophyllia blakeleyensis* p. 91 fig. Upper Oligocene, *woodmanensis* p. 91 fig. Lower Oligocene, *wynoocheensis* p. 92 fig. Oligocene, spp. n. Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.

†*Centrocellulosum* discussed pp. 258, 261, sp. p. 259 fig., *intermedium* lectotype chosen, a sub-genus of *Rotiphyllum* p. 261, HUDSON 50.

Ceriantheomorpha brasiliensis cnidae p. 12 fig., CARLGREN 10.

Ceriantheopsis americanus cnidae p. 12, CARLGREN 10.

Cerianthus lloydii cnidae p. 9 fig., CARLGREN 10.

†*Chlamydoephyllum expansum* sp. n. p. 18 fig. L. Devonian Queensland, HILL Proc. roy. Soc. Queensl. 54 2 1942.

Cirripathes densiflora cnidae p. 15 fig., CARLGREN 10.

†*Cladocora recrescens* p. 52 fig., THOMAS 101.

†*Claviphyllum* gen. n., genotype (by author's designation) *Cyathopsis* ? *eruca* p. 262 fig., sp. p. 262 fig., *carruthersi* p. 262 fig., possibly a synonym of *Lophophyllum* p. 262, HUDSON Geol. Mag. London 79 5 1942.

†*Clisaxophyllum* discussed pp. 129, 135, HERITSCH 39.

†*Clisiophyllum* aff. *multiseptatum* p. 77 fig., sp. p. 78 fig., *C.* (?) sp. p. 78 fig., GORSKY 32.—*C.* discussed p. 129, *carnicum* transferred to *Amandophyllum* p. 137, "*C.*" *zeliae* p. 137, HERITSCH 39.

†*Coeloria wellsi* sp. n. p. 506 fig. M. Eocene California, DURHAM Proc. Calif. Acad. Sci. (4) 23 34 1942.

†*Coenocyathus* ? *hannibali* sp. n. p. 93 fig. Oligocene Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.

†*Colpophyllia reaganii* sp. n. p. 96 fig. Middle Eocene Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.

†*Columnaria neminghensis* transferred to *Favistella* p. 158 fig., HILL 46.

Coralliomorpha antarcticus cnidae p. 20, CARLGREN 10.

Cryptodendrum adhesivum cnidae p. 32 fig., CARLGREN 10.

†*Cyathoclisia* discussed p. 82, *multiseptatum* sp. n. pp. 83, 187 fig. Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.—*C.* discussed p. 130, *myatshkovensis* and *symmetrica* transferred to *Amandophyllum* p. 137, HERITSCH 39.

†*Cyathophylloid* sp. a p. 380 fig., sp. b p. 380 fig., MERRIAM 72.

†*Cyathophyllum pseudovermiculare* almost certainly a species of *Spongyphyllum* p. 9, SMITH 91.

†*Cyathopsis* ? *eruca* made genotype of *Claviphyllum* (q.v.) p. 262, HUDSON 50.

†*Cystimorpha* discussed p. 241, HILL 44.

†"*Cystiphyllum*" *australe* p. 243 fig., "*C.*" cf. *pseudoseptatum* p. 244 fig., HILL 44.—"*C.*" sp. p. 16 fig., HILL 45.—"*C.*" *australe* sp. n. p. 149, *multituberculatum* sp. n. p. 149 fig. Devonian New South Wales, HILL J. Proc. roy. Soc. N.S.W. 76 1942.—"*C.*" sp. p. 182 fig., *conjunctum* sp. n. p. 185 fig. L. Devonian New South Wales, HILL J. Proc. roy. Soc. N.S.W. 76 1942.—"*C.*" *vesiculosum* p. 558 fig., sp. n. p. 558 fig. Middle Devonian Ohio, STUMM J. Paleont. Menasha Wis. 16 5 1942.

Dactylanthus antarcticus cnidae p. 19 fig., CARLGREN 10.

†*Dendrophyllia hannibali* p. 100, *cowlitzensis* sp. n. p. 100 fig. Upper Eocene Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.

†*Dendroseris harrisoni* a *Stylina* p. p. 128, WELLS 106.

†*Densiphyllum rushianum* genotype of *Rotiphyllum* (q.v.) p. 257, *Densiphyllum* [sic] discussed p. 260, *charlestonensis* lectotype chosen, *granulatum*, *mammulatum* all species of *Rotiphyllum* (q.v.) p. 260, HUDSON 50.

Diadumene cincta cnidae p. 37 fig., CARLGREN 10.

†*Dialithophyllum fultum* sp. n. p. 247 fig. M. Devonian Queensland, HILL Proc. roy. Soc. Queensland 53 14 1942.

†*Dibunophyllum confertum* pp. 86, 189 fig., *tenuiculum* pp. 88, 191 fig., *multiseptatum* pp. 90, 192 fig., sp. n. Carboniferous Novaya Zemlya, D. ? sp. p. 91 fig., GORSKY Trans. arctic Inst. Leningrad 93 1938.—*D. oregonensis* sp. n. p. 373 fig. L. Carboniferous Oregon, D. ? sp. p. 375 fig., MERRIAM J. Paleont. Menasha Wis. 16 3 1942.

†*Diphyphyllum* (*Depasophyllum*) *elegans* sp. n. pp. 62, 175 fig. Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.—*D. robustum* a *Disphyllum* (q.v.) p. 150 fig., *Diphyphyllum* ? *porteri* a *Phacellophyllum* (q.v.) p. 151 fig., HILL 46.—*D. sinuosum* nom. n. (pro *Lithostrotion flexuosa* Warren non Trautschold) p. 358 ? Pennsylvanian Alberta, *mutabile* sp. n. p. 358 fig. ? Pennsylvanian Alberta and U.S.A., sp. p. 359, KELLY J. Paleont. Menasha Wis. 16 3 1942.

†*Diphystrotion* see also *Lithostrotion*.

†*Diploastraea crassolamellata* typical form p. 56 fig., var. *magnifica* p. 57 fig., THOMAS 101.

†*Diploria* sp. cf. *dumblei* p. 55 fig., THOMAS 101.

†*Discotrochus* sp. p. 92 fig., DURHAM 20.

†*Disphyllum gregorii* p. 247 fig., *D.* (or *Macgea*) *trochoides* sp. n. p. 249 fig., *excavatum* sp. n. p. 250 fig., M. Devonian Queensl., HILL Proc. roy. Soc. Queensland 53 14 1942.—*D. robustum* p. 150 fig., cf. *gregorii* p. 151 fig., HILL 46.—*D. mesa* sp. n. p. 185 fig. L. Devonian New South Wales, HILL J. Proc. roy. Soc. N.S.W. 76 1942.

†*Dohmophyllum* synonymous with *Trematophyllum* and *Sparganophyllum* p. 236, *implicatum* p. 236, *clarkei* sp. n. p. 236 fig. M. Devonian Queensland, HILL Proc. roy. Soc. Queensland 53 14 1942.—*D.* sp. or *Acanthophyllum* sp. p. 14, HILL 45.—*D.* sp. p. 146 fig., HILL 46.

†*Eddastraea* gen. n. p. 147, genotype (by original designation) *Phillipsastraea grandis* p. 148 Devonian New South Wales, *gigas* p. 148, HILL J. Proc. roy. Soc. N.S.W. 76 1942.—*E.*

expansa sp. n. p. 184 fig. ? L. or M. Devonian New South Wales, HILL J. Proc. roy. Soc. N.S.W. 76 1942.

Edwardsia longicornis cnidae p. 23 fig., CARLGREN 10.

Eloactis mazellii cnidae p. 26, CARLGREN 10.

†*Endophyllum caninoides* p. 22 fig., *alferovi* var. *septata* var. n. pp. 22, 146 fig., *nalivkini* var. *microcystosa* var. n. pp. 24, 147 fig., Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.—*E. abditum* var. *columna* var. n. p. 252 fig. M. Devonian Queensland, HILL Proc. roy. Soc. Queensland 53 14 1942.—*E.* cf. *abditum* p. 155 fig., *schluteri* var. *colligatum* transferred to *Sanidophyllum* p. 157 fig., HILL 46.

†*Entelophyllum* sp. p. 4 fig., HILL 43.—*E. arborescens* designated genotype of *Radiophyllum* (q.v.) p. 17, HILL 45.

†*Enygmorephyllum dubium* sp. n. pp. 44, 163 fig. Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.

†*Eridophyllum bartrumi* p. 158 fig., HILL 46.—*E. bartrumi* p. 183 fig., *immersum* sp. n. p. 186 fig. ? L. Devonian New South Wales, HILL J. Proc. roy. Soc. N.S.W. 76 1942.—*E. seriale* p. 558 fig., *archiaci* p. 558 fig., *subcaespitosum* p. 558 fig., STUMM 95.

†*Eugyra* a synonym of *Myriophyllia* p. 1, WELLS 105.

†*Eupsammid* sp. p. 101 fig., DURHAM 20.

†*Eusmilia bainbridgensis* sp. n. p. 95 fig. Upper Oligocene Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.

†*Fasciculophyllum* discussed pp. 258, 260, sp. p. 259 fig., *dybowski* p. 260, *omalusi*, *ambigua*, *densa* p. 261, *eruca* not a *Fasciculophyllum* p. 260, HUDSON 50.—*F.* near *carruthersi* p. 344 fig., SMITH 92.

†*Fasciphyllum ryani* sp. n. p. 253 fig. M. Devonian Queensland, HILL Proc. roy. Soc. Queensland 53 14 1942.

Favesia (*Milne-Edwardsia*) *loveni* cnidae p. 23 fig., *carnea* cnidae p. 25 fig., CARLGREN 10.

†*Favia hannai* sp. n. p. 506 fig. M. Eocene California, DURHAM Proc. Calif. Acad. Sci. (4) 23 34 1942.

†*Favistella cerioides* sp. n. p. 5 fig. U. Ordovician or Silurian Tasmania, HILL Pap. Proc. roy. Soc. Tasmania 1941.—†*F. rhenana* p. 253 fig., HILL 44.—†*F. cf. rhenana* p. 158 fig., *æmingskensis* p. 158 fig., HILL 46.

Flabellum mcandrewi cnidae p. 47 fig., CARLGREN 10.

†*Flabellum hertleini* sp. n. p. 92 fig. Lower Oligocene Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.—*F. cuneiformis* var. *wailesi* p. 179, RICHARDS & HARBISON 85.

†*Gangamophyllum* gen. n. pp. 101, 198, genotype (by author's designation) *boreale* pp. 103, 199 fig., *latum* pp. 106, 201 fig., *oblongum* pp. 109, 203 fig., spp. n. Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.

Gonactinia prolifera cnidae p. 17, CARLGREN 10.

†*Goniopora regularis* p. 57 fig., THOMAS 101.

†*Grypophyllum* sp. p. 255 fig., *compactum* sp. n. p. 255 fig. M. Devonian Queensland, *isactis* and *schwelmense* species of *Stringophyllum* p. 256, HILL Proc. roy. Soc. Queensl. 53 14 1942.—? *G. aggregatum* p. 183 fig., HILL 47.

†*Hadrophyllum edwardsianum* a species of *Rotiphyllum* (q.v.) p. 258, HUDSON 50.

Halcampa duodecimcirrata cnidae p. 27 fig., CARLGREN 10.

Halcampoides purpurea cnidae p. 25 fig., CARLGREN 10.

Halcurias carlgreni cnidae p. 22, CARLGREN 10.

Haliactis arctica cnidae p. 28, CARLGREN 10.

†*Hallia* discussed p. 159, HILL 46.

†*Heliophyllum chillagoense* p. 6, ?*chillagoense* p. 6 fig., HILL 43.—*H. halli* p. 558 fig., *degener* p. 558 fig., *reflexum* p. 558 fig., *confluens* p. 558 fig., *arachne* p. 559 fig., sp. p. 559 fig., STUMM 95.

†*Hercophyllum shearsbyi* p. 7 fig., HILL 43.

†*Heterophrentis prolifica* p. 558 fig., *simplex* p. 558 fig., STUMM 95.

†*Hexaphyllia* discussed p. 120, sp. p. 121 fig., GORSKY 32.

Hormathia digitata cnidae p. 44 fig., CARLGREN 10.

†*Iranophyllum splendens* p. 5 fig., *spongifolium* sp. n. p. 6 fig. Permian Burma, *carcinophylloides* p. 7 fig., SMITH Palaeont. indica 30 2 1941.

Isactinernus 4-lobatus cnidae p. 22 fig., CARLGREN 10.

Isarachnanthus panamensis cnidae p. 13 fig., CARLGREN 10.

†*Isastrea* [sic] sp. p. 126 fig., sp. p. 126, WELLS 106.

†*Latomeandra orthogrammica* a *Myriophyllia* p. 1, WELLS 105.

†*Leptastrea hertleini* sp. n. p. 507 fig. M. Eocene California, DURHAM Proc. Calif. Acad. Sci. (4) 23 34 1942.

†*Leptophyllastrea* [sic] *vaughani* sp. n. p. 97 fig. Middle Eocene Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.

†*Lithostrotion junceum* p. 64 fig. *caespitosum* p. 65, *portlocki* p. 66 fig., GORSKY 32.—*L. (Siphonodendron) irregulare* p. 188, *martini*, *junceum* p. 189, HERITSCH 40.—*L. whitneyi* p. 359 fig., *proliferum* p. 359 fig., *harmodites* p. 360 *flexuosum* Warren non Trautschold renamed *Diphyphyllum sinuosum* p. 358 ? Pennsylvanian Alberta, KELLY J. Paleont. Menasha Wis. 16 3 1942.—*L.* discussed p. 376, *L. (L.) packardii* sp. n. p. 377 fig. L. Carboniferous Oregon, L. (*Lithostrotionella*) *occidentalis* sp. n. p. 377 fig. Permian Oregon, L. (*Lithostrotionella*) *berthiaumi* sp. n. p. 378 fig. Permian Oregon, L. (*Siphonodendron*) *oregonensis* sp. n. p. 379 fig. L. Carboniferous Oregon, L. ? {*Diphytrotion*} sp. p. 380 fig., cf. *L. mamillare* var. *sublaevis* p. 374, MERRIAM J. Paleont. Menasha Wis. 16 3 1942.

†*Lithostrotionella pennsylvanica* p. 352 fig., *astraeiformis* p. 352, *banffensis* p. 354, *jasperensis* sp. n. p. 356 fig. Mississippian Alberta, *micra* sp. n. p. 357 fig. ? Pennsylvanian Alberta, sp. p. 357, KELLY J. Paleont. Menasha Wis. 3 1942.—*L.* see also *Lithostrotion*.

†*Loepophyllum* a synonym of *Stringophyllum* p. 256, HILL 44.

†*Lonsdaleia duplicata duplicata* p. 112 fig., var. *arctica* var. n. pp. 113, 206 fig. var. *septentrionalis* var. n. pp. 114, 206, var. *vesiculosa* var. n. pp. 115, 207 fig., L. (*Wentzelella*) *diversa* sp. n. pp. 116,

208 fig., *L. (W.) multivesiculosa* sp. n. pp. 118, 210 fig., Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.—*L. duplicata* pp. 351, 360 fig., KELLY 56.—*L. prae-nuntia* discussed p. 9, SMITH 91.

Lophohelia prolifera cnidae p. 44 fig., CARLGRÉN 10.

†*Lopholasma delawarensis* sp. n. p. 141 fig. Devonian Ohio, BAKER Amer. J. Sci. New Haven 240 2 1942.

†*Lophophyllum* discussed pp. 69, 178, *L. (Koninckophyllum) irregulare* sp. n. p. 72, 181 fig., *infirmum* sp. n. pp. 74, 183 fig., aff. *cherneyense* p. 76, sp. p. 77 fig., Carboniferous Novaya Zemlya, GORSKY Trans. arctic Inst. Leningrad 93 1938.—*L.* discussed pp. 258, 259, possibly synonymous with *Claviphyllum* (q.v.) p. 262, HUDSON 50.—*L.* discussed p. 3, *orientale* and certain other species belong to *Sinophyllum* p. 3, *konincki* almost certainly conspecific with *Cyathaxonia tortuosa* p. 3, SMITH 91.

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†*Macgeea* (or *Disphyllum*) *trochoides* p. 249 fig., *M. (or D.) excavatum* p. 250 fig., spp. n. M. Devonian Queensland, HILL Proc. roy. Soc. Queensland 53 14 1942.

†*Madracis stewarti* p. 94 fig., *crescentensis* p. 95 fig., spp. n. Middle Eocene Washington State, DURHAM J. Paleont. Menasha Wis. 16 1 1942.

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5. ECHINODERMA

ARRANGED BY

A. G. BRIGHTON, M.A.

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†*Amphoracrinus clitheroensis* sp. n. Carboniferous England, WRIGHT Geol. Mag. London 79 pp. 272-273 pl. x figs. 1-4.

†*Arthracantha* sp., STUMM 65 p. 555 pl. lxxxiii fig. 24.

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6. VERMES

ARRANGED BY

W. NICOLL.

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†*Pteroonus* *bicyrus*, *neossus* spp. n. Bushberg-Hannibal formation, Oklahoma, COOPER J. Paleont. Oklahoma 13 1939 p. 409 pl. xlvii.

†*Siphonognathus* *crenulata*, *isolopha*, *isosticha*, *perlobata*, spp. n. Bushberg-

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†*Solenognathus anida, anomalodus, anomala, aralia, bidentata* p. 410, *curta, dictio, eura, eurynota, isomeces, macra* p. 411, *micra, oliga, pecta, plecta, syntyla, trinodus, tyla, typica* p. 412 pls. xliii–xlv spp. n. Bushberg–Hannibal formation, Oklahoma, COOPER J. Paleont. Menasha 13 1939.

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†*Diopatraites frestis* sp. n. Ordovician, Ontario, ELLER Ann. Carnegie Mus. Pittsburgh 29 1942 p. 261 figs. 24–27.

†*Eunicites seamani* p. 331, *turgidus* p. 332 figs. spp. n. Middle Devonian, New York, ELLER Ann. Carnegie Mus. Pittsburgh 28 1941.—†*E. denticulatus*

p. 252, *purus* p. 253 figs. spp. n. Ordovician, Ontario, ELLER Ann. Carnegie Mus. Pittsburgh 29 1942.

†*Ildraites bowenensis, howelli* p. 328, *anomalus* p. 330 spp. n. Middle Devonian, New York, ELLER Ann. Carnegie Mus. Pittsburgh 28 1941.—†*I. exquisitus, fritzae* p. 248, *patulus* p. 249, spp. n. Ordovician, Ontario, ELLER Ann. Carnegie Mus. Pittsburgh 29 1942.

†*Leodicites scitulus* p. 332, *reimanni* p. 333 pl. xxxviii spp. n. Middle Devonian, New York, ELLER Ann. Carnegie Mus. Pittsburgh 28 1941.—†*L. acclivis* p. 256, *streetsmillensis, creditensis* p. 257, *summus* p. 258, *barbatus, densus* p. 259 figs. spp. n. Ordovician, Ontario, ELLER Ann. Carnegie Mus. Pittsburgh 29 1942.

†*Lumbriconereites clavatus* sp. n. Middle Devonian, New York, ELLER Ann. Carnegie Mus. Pittsburgh 28 1941 p. 331 pl. xxxviii.—†*L. marlenedesae* p. 243, *proclivis, deflexus* p. 244, *copiosus* p. 245 figs. spp. n. Ordovician, Ontario, ELLER Ann. Carnegie Mus. Pittsburgh 29 1942.

†*Nereidavus harbisonae* p. 325, *hamulus* p. 326 figs. 1–5 spp. n. Middle Devonian, New York, ELLER Ann. Carnegie Mus. Pittsburgh 28 1941.—†*N. ineptus, hamus* p. 246, *procurvus* p. 247 figs. spp. n. Ordovician, Ontario, ELLER Ann. Carnegie Mus. Pittsburgh 29 1942.

†*Oenonites excavatus* p. 326, *tenuis, caducaladeri* p. 327 pl. xxxvii spp. n. Middle Devonian, New York, ELLER Ann. Carnegie Mus. Pittsburgh 28 1941.—†*O. conterminus, crepitus* p. 254, *sinuatus* p. 255, *caducus* p. 256 spp. n. Ordovician, Ontario, ELLER Ann. Carnegie Mus. Pittsburgh 29 1942.

†*Paleoenonites* gen. n. *accuratus* p. 250, *latissimus, edentulus* p. 251, *accuratus* p. 252 figs. spp. n. Ordovician, Ontario, ELLER Ann. Carnegie Mus. Pittsburgh 29 1942.

†*Staurocephalites truncatus* sp. n. Middle Devonian, New York, ELLER Ann. Carnegie Mus. Pittsburgh 28 1941 p. 334 fig. 18.—†*S. cuspis* sp. n. Ordovician, Ontario, ELLER Ann. Carnegie Mus. Pittsburgh 29 1942 p. 260 figs.

CORRIGENDA.

Vol. LXXVIII 1941 p. 2 col. i line 12 & p. 75 col. i line 26. For *perecotti* read *percotti*.

7. BRACHIOPODA

BY

J. K. S. ST.-JOSEPH, M.A., Ph.D.

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Full references are given only in the case of new genera or species. In other cases the numeral in “Large bold

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†*Iphidea* Billings 1872 a synonym of *Paterina* Beecher 1891, COOPER 16 p. 229.

†*Paterina* see *Iphidea*.

ORDER ATREMATA.

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MICROMITRIDAE.

†*Dictyonina* **nom. n.** for *Iphidella* Walcott 1912 non Walcott 1905 (equals *Paterina*) with type *Trematis pannulus*, White, COOPER J. Wash. Acad. Sci. 32 1942 p. 228.

†*Micromitra sculptilis*, KINDLE 31 p. 636 pl. i figs. 6-7.

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LINGULIDAE.

†*Barroisella campbelli* **nom. n.** for *Lingula subspatulata* Meek & Worthen 1868 non *Lingula subspatulata* Hall & Meek 1854, COOPER J. Wash. Acad. Sci. 32 1942 p. 228.

†*Lingula borealis*, NEWELL & KUMMEL 40 p. 953 pl. ii figs. 1-4.—*L. milwaukeeensis*, STAINBROOK 53 p. 606.—*L. ligea* pl. lxxxiii fig. 31, *thedfordensis* pl. lxxxiii fig. 32, STUMM 55.

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†*Obolella* (?) sp., KINDLE 31 p. 636 pl. i fig. 11.

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†*Acrotreta arrecta* sp. n. Cambrian Canada (Quebec). KINDLE Amer. J. Sci. New Haven 240 1942 pp. 635-636 pl. i figs. 1-4.

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†*Lingulodiscina marginalis*, STAINBROOK 53 p. 606 pl. lxxxviii figs. 43, 45-46.

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†*Discinisca lugubris*, RICHARDS & HARBISON 44 p. 179 pl. xvii fig. 12.

†*Orbiculoidea ruefemanni* sp. n. Devonian U.S.A. (N.Y.), HOWELL Bull. New York St. Mus. Albany 327 1942 pp. 88-89 pl. xv figs. 3-4.—*O. telleri wardi*, STAINBROOK 53 p. 608.

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†*Crania famelica* p. 608 pl. lxxxviii figs. 36-40, *sheldoni* p. 609 pl. lxxxviii figs. 41-42, STAINBROOK 53.

†*Petrocrania* sp., STAINBROOK 53 p. 610 pl. lxxxviii fig. 44.—*P. hamiltonae*, STUMM 55 pl. lxxxi, fig. 17.

†*Pholidops* Hall 1860 a synonym of *Craniops* Hall 1859, COOPER 16 p. 229.

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†*Nisusia* cf. *festinata*, KINDLE 31 p. 636 pl. i figs. 13-14.

†*Protorthis gossensii* sp. n. Cambrian Canada (Quebec), KINDLE Amer. J. Sci. New Haven 240 1942 pp. 636-637 pl. i figs. 8-10, 12.

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†*Campylorthis* **gen. n.** Ordovician U.S.A. p. 621 for type *Strophomena deflecta* Conrad p. 621 pl. xc figs. 6-12, ULRICH & COOPER J. Paleont. Menasha, Wis. 16 1942.

ORTHIDIELLIDAE.

†*Trematorthis* correction for *Tremorthis* err. typ. Ulrich & Cooper 1938, COOPER 16 p. 230.

CLITAMBONACEA.

†*Orthambonites* for type *O. transversa* Pander 1830 usage discussed, COOPER 16 p. 228-229.

DALMANELLACEA.

DALMANELLIDAE.

†*Cariniferella carinata*, STAINBROOK 53 p. 882 pl. i figs. 9-10.

†*Dalmanella* restricted to species of type *D. testudinaria* [see also entry under *Wattsella*], COOPER 16 p. 229.—*D. rogata*, HOWELL 29 p. 83.

†*Dalmanella* sensu stricto Schuchert & Cooper 1932 a synonym of *Resserella*, COOPER 16 p. 229.

†*Thiemella danbyi*, STAINBROOK 53 p. 882 pl. i fig. 13.

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†*Fascicostella gervillei*, GILL 21 p. 37 pl. vi figs. 3–5.

†*Wattsella* Bancroft, a synonym of *Dalmanella* sensu stricto (type *D. testudinaria*), COOPER 16 p. 229.

RHIPIDOMELLIDAE.

†*Rhipidomella pecosi*, EINOR 18 p. 9 pl. i figs. 1–2.—*R. michelini*, LICHAREW & EINOR 35 p. 12 pl. i figs. 1, 4.—*R. penelope* pl. lxxxiii fig. 33, *vanuxemi* pl. lxxxiii fig. 34, STUMM 55.—*R. lyelliana* BOND 7 p. 301 fig. 38.

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†*Orthotichia derbyi* p. 14 pl. i fig. 6, *morganiana* p. 13 pl. i figs. 3, 5, LICHAREW & EINOR 35.

†*Fascifera* gen. n. p. 620 for type *F. subcarinata* sp. n. Ordovician U.S.A. (Tennessee) pp. 620–621 pl. xc figs. 1–5, ULRICH & COOPER J. Paleont. Menasha, Wis. 16 1942.

†*Orthis* (*Proschizophoria*) *personata*, SCHOUPEFFÉ 49 p. 347 1 figure.

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†*Parastrophina hemiplicata*, HOBSON 27 fig. 5.

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PENTAMERIDAE.

†*Aliconchidium* gen. n. p. 247 for type *A. uassi* sp. n. pp. 249–252 figs. 1–4 Upper Silurian New South Wales, St.-JOSEPH Ann. Mag. Nat. Hist. (11) 9 1942.

†*Pentamerella pavilionensis*, STUMM 55 pl. lxxxiv figs. 17–18.

†*Sieberella galeata*, CLARK 11 p. 27

CAMEROPHORIIDAE.

†*Camarophoria sella* var. *quadrata* var. n. Permian Novaya Zemlya, EINOR in LICHAREW & EINOR Trans. arctic Inst. Leningrad 127 1939 pp. 70–71 pl. xiv fig. 4.—*C.* sp., EINOR 18 p. 93 pl. xv fig. 3.—*C. biplicata* p. 71 pl. xiv fig. 6, cf. *kutorgae* p. 68 pl. xiv fig. 1, cf. *superstes* p. 69 pl. xiv fig. 3, *sella* var. *arctica* p. 69 pl. xiv fig. 5, LICHAREW & EINOR 35.—*C. gregeri* p. 615 figs. 6a–c pl. lxxxviii figs. 16–21, *subovata* p. 613 pl. lxxxviii figs. 29–35, *swallovi* p. 614 figs. 1a–j pl. lxxxviii figs. 22–28, STAINBROOK 53.—*C. kernahani*, STUMM 55 pl. lxxxiv figs. 25–27.

†*Camerophoria* King 1844 a synonym of *Stenocisma* Conrad 1839, COOPER 16 p. 229.

†*Sedenticellula* gen. n. for type *Camarophoria hamburgensis* Weller 1910 Carboniferous U.S.A., COOPER J. Wash. Acad. Sci. 32 1942 p. 231.

STROPHOMENACEA.

STROPHOMENIDAE.

Strophomenidae, ARBER 3 pp. 180–183 figs. 1–2.

†*Bimuria* gen. n. p. 622 for type *B. superba* sp. n. Ordovician U.S.A. (Tennessee) p. 623 pl. xc figs. 13–18, ULRICH & COOPER J. Paleont. Menasha, Wis. 16 1942.

†*Chemungia* cf. *coelata* p. 882 pl. ii fig. 1, sp. p. 882 pl. ii figs. 2, 4, STAINBROOK 52.

†*Dactylogonia* gen. n. p. 623 for type *D. geniculata* sp. n. Ordovician U.S.A. (Tennessee) p. 624 pl. xc figs. 19–23, ULRICH & COOPER J. Paleont. Menasha, Wis. 16 1942.

†*Derbyia waageniformis* sp. n. pp. 19-20 pl. i figs. 11-12 Permian Novaya Zemlya, cf. *altestriata* p. 20 pl. i fig. 10, *regularis* var. p. 17 pl. i figs. 7-8 LICHAREW & EINOR Trans. arctic Inst. Leningrad 127 1939.—*D.* cf. *regularis*, EINOR 18 p. 10.

†*Douvillina* cf. *arcuata*, STAINBROOK 53 p. 882 pl. i figs. 11-12.—*D. inaequistriata*, STUMM 55 pl. lxxxiv fig. 4.

†*Douvillinella variabilis*, STAINBROOK 53 p. 882 pl. ii figs. 23-24.

†*Hipparionyx minor*, GILL 21 p. 39 pl. v figs. 1, 10, pl. vi fig. 2.

†*Kirkina* gen. n. pp. 598-599 fig. 7 for type *K. millardensis* sp. n. Ordovician U.S.A. (Utah), SALMON J. Paleont. Menasha, Wis. 16 1942 pp. 599-600 pl. lxxxvii figs. 34-35.

†*Leptaena rhomboidalis*, GILL 21 p. 40 pl. v figs. 3, 8.

†*Leptostrophia* sp., STAINBROOK 52 p. 883 pl. i figs. 21-22.—*L. perplana*, STUMM 55 pl. lxxxiv fig. 3.

†*Meekella eximia* p. 21 pl. ii fig. 1, aff. *eximaeformis* p. 21 pl. ii fig. 2, LICHAREW & EINOR 35.

†*Opikina* gen. n. pp. 589-591 figs. 1c, 6 for type *O. septata* sp. n. pp. 591-592 pl. lxxxvii figs. 1-4, *ruedemanni* sp. n. p. 597 pl. lxxxvii figs. 31 33 Ordovician U.S.A., *clara* p. 597 pl. lxxxvii fig. 28, *dorsata* p. 592 pl. lxxxvi figs. 39-44, *inquassa* p. 593 pl. lxxxvii figs. 12-14, *minnesotensis* p. 592 pl. lxxxvii figs. 5-11, *transitionalis* p. 595 pl. lxxxvii figs. 15-18, 21-23, *wagneri* p. 596 pl. lxxxvii figs. 19-20, "*williamsi*" p. 596 pl. lxxxvii figs. 24-27, SALMON J. Paleont. Menasha, Wis. 16 1942.

†*Pholidostrophia nacrea*, STUMM 55 pl. lxxx fig. 32.

†*Refinesquina* genus redescribed pp. 564-574 figs. 1a, 2-5, *Leptaena trentonensis* Conrad chosen as type species pp. 570, 574-576 fig. 5a pl. lxxxv figs. 1-10, *deerensis* p. 581 fig. 3 pl. lxxxvi figs. 1-2, *edmondensis* pp. 585-586 pl. lxxxvi figs. 25-26, *elongata* p. 576 pl. lxxxv figs. 14-17, *lennoxensis* p. 576 pl. lxxxv figs. 18-20, *lewisensis* pp. 579-580 pl. lxxxv figs. 34-35, *minuta* pp. 577-578 pl. lxxxv figs. 26-27, *ollivieri* p. 577 pl. lxxxv figs. 21-22, *prestonensis* pp. 578-579 pl. lxxxv figs. 28-33,

sardesoni pp. 588-589 fig. 5b pl. lxxxvi figs. 35-38 spp. n. Ordovician U.S.A., *camerata* p. 586 pl. lxxxvi figs. 29-34, *carlottina* p. 580 pl. lxxxvi figs. 36-37, *declivis* p. 581 pl. lxxxvi figs. 3-13, *delloidea* p. 583 pl. lxxxvi figs. 16-20, *equipunctata* p. 586 pl. lxxxvi figs. 27-28, *normalis* p. 585 fig. 3, pl. lxxxvi figs. 21-24, *ponderosa* fig. 5c pl. lxxxv figs. 11-13, *praecursor* p. 582 pl. lxxxvi figs. 14-15, *robusta* p. 577 pl. lxxxv figs. 23-25, *rugosa* p. 598 with var. *avita* p. 598, *tenuilineata* p. 598, *winchesterensis* p. 580 with var. *flistriata* p. 580, "*hermitagensis*" pl. lxxxv figs. 7-10, SALMON J. Paleont. Menasha, Wis. 16 1942.

†*Schellwienella cylindrica* p. 15 pl. ii fig. 4, *kellii* var. nov. p. 14 pl. ii fig. 3, sp. p. 16 pl. i fig. 9, LICHAREW & EINOR 35.

†*Schuchertella chemungensis*, STAINBROOK 52 p. 882.—*S. arctostriata* pl. lxxxiv fig. 5, *perversa* pl. lxxxiv fig. 6, STUMM 55.

†*Sowerbyella sericea jugata*, HOWELL 29 p. 83.

†*Stropheodonta varistriata*, CLARK 11 p. 25.—*S. bipartita*, GILL 21 p. 41 pl. v figs. 7, 9 pl. vi fig. 10.—*S. concava* pl. lxxx fig. 29, pl. lxxxiv fig. 2, *demissa* pl. lxxx fig. 30, pl. lxxxv fig. 1, "*plicata*" pl. lxxx fig. 31, STUMM 55.

†*Stropheodonta (Leptostrophia) tardifi* var. *lambtonensis* var. n. Devonian Quebec pp. 24-25 pl. i figs. 1-2, CLARK Trans. roy. Soc. Can. (3) 36 4 1942.

†*Strophomena grandis*, SALMON 47 p. 598 fig. 1b pl. lxxxvii figs. 29-30.

†*Strophonella parva* sp. n. pp. 26-27 pl. i figs. 3-5 Devonian Quebec, *geniculata*, *punctulifera* p. 26, CLARK Trans. roy. Soc. Can. (3) 36 4 1942.

†*Sulcatostrophia calvini* p. 882 pl. ii figs. 21-22, sp. p. 882, STAINBROOK 52.

†*Tropidoleptus carinatus*, STUMM 55 pl. lxxxi fig. 16.

THECIDEIDAE.

Lacazella mediterranea, ARBER 3 p. 184 fig. 3.

CHONETIDAE.

†*Anoplia australis* pp. 38-39 pl. iv fig. 8, *withersi* p. 39 pl. iv fig. 7 spp. n. Devonian Australia (Victoria), GILL Proc. roy. Soc. Vict. N.S. 54 1 1942.—*A.* sp., CLARK 11 p. 27.

†*Chonetes minutus* var. *hemisphericus* var. n. Devonian U.S.A. (Ohio), BAKER Amer. J. Sci. New Haven **240** 1932 pp. 141-142 pl. iii fig. 3.—*C. novozemljäensis* sp. n. [nom. nud.] Carboniferous Novaya Zemlya, RYSSUKOV Trans. arctic Inst. Leningrad **57** 1937 p. 162.—*C. sp.*, STAINBROOK **52** p. 883.—*C. coronatus* pl. lxxx fig. 33, *deflectus* pl. lxxx figs. 36-37, *mucronatus* pl. lxxxiv fig. 7, *scitulus* pl. lxxx figs. 34-35, *setigerus* pl. lxxx fig. 38, STUMM **55**.

†*Chonetes* (*Chonetes*) cf. *granulifer* p. 22 pl. ii figs. 5-6, *violatus* p. 23, LICHAREW & EINOR **35**.

†*Chonetes* (*Chonetina*?) *flamingi*. LICHAREW & EINOR **35** p. 23 pl. ii figs. 7-9.

†*Chonetes* (*Paeckelmannia*) *novozemliaensis* sp. n. pp. 25-26 pl. ii figs. 14-18 Permian Novaya Zemlya, LICHAREW in LICHAREW & EINOR Trans. arctic Inst. Leningrad **127** 1939.—*C. (P.) ambiensis* p. 28 pl. ii figs. 19-20, *morahensis* p. 28, sp. nov. aff. *capitolinus* p. 26 pl. ii figs. 10-13, LICHAREW & EINOR **35**.

†*Longispina* gen. n. for type *Chonetes emmetensis* Winchell 1866 Carboniferous U.S.A., COOPER J. Wash. Acad. Sci. **32** 1942 p. 230.

PRODUCTIDAE.

†*Avonia lino-spinosa* p. 466 pl. lxxi figs. 5-7, *minuta* pp. 466-467 pl. lxxi figs. 3-4, *snowyensis* pp. 465-466 pl. lxxii figs. 4-6 spp. n. Carboniferous U.S.A., SUTTON J. Paleont. Menasha, Wis. **16** 1942.—*Productus (A.) boulei*, EINOR **18** p. 47 pl. vii figs. 4-7.—*P. (A.) cf. boulei* p. 29 pl. iii fig. 1, *verhoyanicus* p. 30 pl. iii figs. 4-6, sp. nov. No. 1 p. 30 pl. iii figs. 2-3, LICHAREW & EINOR **35**.

†*Buxtonia floydensis* sp. n. Carboniferous U.S.A. (Indiana), p. 467 pl. lxxii figs. 7-8, *setigera* pl. lxxii figs. 12-13, SUTTON J. Paleont. Menasha, Wis. **16** 1942.—*Productus (B.) jernovoensis* sp. n. [nom. nud.] Carboniferous Russia, LICHAREW C.R. Acad. Sci. Moscou N.S. **31** 2 1941 p. 187.—*P. (B.) aff. kweichowensis*, EINOR **18** p. 46 pl. vii fig. 3.—*P. (B.) juresanensis* p. 36 pl. iv fig. 5, *saranaeanus* p. 37 pl. v fig. 1, LICHAREW & EINOR **35**.

†*Dictyoclostus kremenskensis* sp. n. p. 136 pl. iv figs. 3a-c Carboniferous Russia (Moscow basin), *hindi* p. 135

pl. iii fig. 1, SARYTCHEVA Bull. Acad. Sci. U.R.S.S. Sér. Biol. **1940** 1.—*Productus (D.) semireticulatus* mut. *rossica* mut. n. [nom. nud.] Carboniferous Russia (Taimyr), ANIKEEV & GUSSEV Trans. arctic Inst. Leningrad **140** 1939 pp. 31, 118.—*P. (D.) semireticulatus* mut. *rossica* mut. n. pp. 21-22 pl. iv figs. 1-2 Permian Russia (Taimyr), aff. *boliviensis* p. 27 pl. v fig. 3, aff. *brasilienensis* p. 25 pl. iv figs. 4-6, pl. v fig. 1, *noinskii* p. 29 pl. v fig. 2, *schucherti* p. 23 pl. iii figs. 5-7, pl. iv fig. 3, EINOR Trans. arctic Inst. Leningrad **135** 1939.—*D. fosteri* pp. 467-468 pl. lxxii figs. 1-3, *manardensis* pp. 469-470 pl. lxxi figs. 8-10 spp. n. Carboniferous U.S.A. (Oklahoma), *americanus* pl. lxxi figs. 11-12, *cherokeensis* pl. lxxi fig. 11, *crawfordsvillensis* pl. lxxi figs. 1-2, SUTTON J. Paleont. Menasha, Wis. **16** 1942.—*P. (D.) bassi*, CLIFTON **12** p. 689 pl. cii figs. 14-15.

†*Eomarginifera lobata*, SARYTCHEVA **48** pl. iii fig. 2.

†*Institella* gen. n. for type *Productus leonardensis* King 1930 Carboniferous U.S.A., COOPER J. Wash. Acad. Sci. **32** 1942 p. 230.

†*Linoproductus altonensis*, SUTTON **56**, pl. lxxii figs. 9-11.—*Productus (L.) cora* var. *extensa* var. n. [nom. nud.] Carboniferous Russia, LICHAREW C.R. Acad. Sci. Moscou N.S. **31** 2 1941 p. 187.—*P. (L.) aagardi*, ANIKEEV & GUSSEV **1** p. 31 fig. 204.—*P. (L.) aagardi* p. 29 pl. v figs. 4-5, *batesianus* p. 32 pl. v figs. 9-11 *framiformis* var. p. 34 pl. v figs. 12-13, *kolymaensis* var. *rugosa* p. 31 pl. v. figs. 6-8, EINOR **18**.

†*Marginicinctus*? synonym of *Worthenella*, SUTTON **56** p. 464.—*M.*, SUTTON **57** p. 777.

†*Productella walcotti*, STAINBROOK **52** p. 883 pl. ii figs. 17-18.—*P. navicella* pl. lxxxiv figs. 8-9, *spinulicosta* pl. lxxxiv fig. 10, STUMM **55**.

†*Productus tschussovensis* var. *binudaensis* var. n. [nom. nud.] Carboniferous Russia (Taimyr), ANIKEEV & GUSSEV Trans. arctic Inst. Leningrad **140** 1939 p. 118.—*P. litkei* sp. n. pp. 58-59 pl. xii figs. 1-7, *villiersi* mut. *permiana* mut. n. pp. 43-45 pl. vii fig. 2 Permian Novaya Zemlya, LICHAREW in LICHAREW & EINOR Trans. arctic Inst. Leningrad **127** 1939.—*P. proprius* sp. n. [nom. nud.] p. 187, *donetzianus* mut. *crassiorinata*

mut. n. [nom. nud.] p. 186, *gratiodentalis* var. *gratiosiformis* **var. n.** [nom. nud.] p. 187 Carboniferous Russia, LICHAREW C.R. Acad. Sci. Moscou N.S. **31** 2 1941.—*P. impressus* p. 60 pl. xiii figs. 1–3, sp. nov. (?) No. 6 p. 53 pl. x figs. 1–2, sp. nov. (?) No. 7 pl. xii fig. 8, sp. No. 8 p. 60 pl. xii fig. 9, LICHAREW & EINOR **35**.—*P. concinnus* pl. iii fig. 2, cf. *parvus* p. 132 pl. i fig. 2, SARYTCHEVA **48**.

†*Productus* (*Cancrinella*) cf. *cancrini*, EINOR **18** p. 36 pl. v fig. 14.

†*Productus* (*Echinoconchus*) *taimyrensis* **sp. n.** Carboniferous Russia (Taimyr peninsula), ANIKEEV & GUSSEV Trans. arctic Inst. Leningrad **140** 1939 p. 32 fig. 20₁.—*P. (E.) taimyrensis* **sp. n.** pp. 38–39 pl. vi figs. 2–5 Permian Russia (Taimyr), sp. aff. *punctatus* p. 36 pl. vi fig. 6, aff. *sterlitamakensis* p. 36 pl. vi fig. 1, EINOR Trans. arctic Inst. Leningrad **135** 1939.

†*Productus* (*Horridonia*) *borealis* p. 55 pl. x figs. 6–11, pl. xi figs. 1–5, *pseudo-horridus* ? p. 54 pl. x figs. 4–5, LICHAREW & EINOR **35**.

†*Productus* (*Marginifera*) *capaciformis* **nom. nov.** for *M. typica* var. *borealis* Ivan. p. 187, *timanensis* **nom. nov.** for *P. (M.) timanica* Tschern. p. 187 footnote 2, with vars. *laticostata* and *pusilliformis* **vars. n.** [nom. nud.] p. 188, *uralensis* **nom. nov.** for *P. uralicus* Tschern. 1902 (non *M. uralica* Tschern. 1889) p. 187 footnote 2 Carboniferous Russia, LICHAREW C.R. Acad. Sci. Moscou N.S. **31** 2 1941.—*P. (M.)* cf. *septentrionalis* LICHAREW & EINOR **35** p. 61 pl. xiii fig. 4.

†*Productus* (*Plicatifera*) aff. *chaoi* p. 52 pl. ix figs. 8–10, sp. nov. (?) No. 5 p. 53 pl. ix figs. 6–7, LICHAREW & EINOR **35**.

†*Productus* (*Productus*) *orientalis* with vars. *byrangi*, *pseudoamericana* and *subrectangula* **vars. n.** [nom. nud.] Carboniferous Russia (Taimyr), ANIKEEV & GUSSEV Trans. arctic Inst. Leningrad **140** 1939 pp. 31, 118.—*P. (P.) orientalis* with vars. *byrangi* pp. 10–14 pl. i figs. 3–5, pl. ii fig. 1, *pseudoamericana* pp. 15–17 pl. ii figs. 2–3, *subrectangularis* pp. 14–15 pl. ii figs. 4–5 **vars. n.**, *taiyuanfuensis* var. *tareiaensis* **var. n.** pp. 17–19 pl. ii fig. 6, pl. iii figs. 1–3 Permian Russia (Taimyr), *uralicus* p. 19

pl. iii fig. 4, EINOR Trans. arctic Inst. Leningrad **135** 1939.—*P. (P.) aagardi* p. 40 pl. vi figs. 3–5, *arcticus* p. 47 pl. vii figs. 10–11, pl. viii fig. 4, *cancriniformis* p. 45 pl. vii figs. 3–4, *cora* with var. *neffedievi* p. 38 pl. iv fig. 6, *gruenewaldti* p. 50 pl. ix fig. 5, *kolymaensis* p. 39 pl. vi figs. 6–8, *lutkevichi* p. 38 pl. v figs. 2–5, cf. *phosphaticus* p. 46 pl. vii figs. 5–6, *schrenki* p. 41 pl. vi figs. 1–2, cf. *transversalis* p. 48 pl. viii figs. 1–3, cf. *uralicus* p. 49 pl. ix fig. 1, sp. p. 41 pl. v figs. 6–7, sp. nov. (?) No. 2 p. 42 pl. vii fig. 1, sp. No. 3 p. 47 pl. vii figs. 7–9, sp. No. 4 p. 50 pl. ix figs. 2–3, sp. nov. aff. *multistriatus* p. 51 pl. ix fig. 4, LICHAREW & EINOR **35**.

†*Productus* (*Pustula*) *neopunctatus* **sp. n.** [nom. nud.] Carboniferous Russia, LICHAREW C.R. Acad. Sci. Moscou N.S. **31** 2 1941 p. 187.—*P. (P.)* sp. aff. *fimbriatus*, EINOR **18** p. 39 pl. vi figs. 7–8.—*P. (P.) fimbriatus* p. 32 pl. iii figs. 10–11, *sterlitamakensis* p. 31 pl. iii figs. 7–9, LICHAREW & EINOR **35**.

†*Productus* (*Waagenoconcha*) *pseudo-irginae* var. *assinuata* **var. n.** p. 30 fig. 20₃, *gangeticus* var. *piassina* **var. n.** [nom. nud.] pp. 33, 118 Carboniferous Russia (Taimyr peninsula), ANIKEEV & GUSSEV Trans. arctic Inst. Leningrad **140** 1939.—*P. (W.)* p. 41, *gangeticus* var. *piassinaensis* **var. n.** pp. 42–44 pl. vii fig. 2 [printed *piassinaensis* on p. 42, ? err. typ.], *pseudo-irginae* var. *asinuata* **var. n.** pp. 44–45 pl. vii fig. 1 Permian Russia (Taimyr), EINOR Trans. arctic Inst. Leningrad **135** 1939.—*P. (W. ?) irginae* p. 33 pl. iii fig. 12, pl. iv fig. 1 with var. *irginaeformis* p. 35 pl. iv figs. 2–4, LICHAREW & EINOR **35**.

†*Setigerella*, SUTTON **56** pp. 464–465.

†*Striatifera spinifera*, SARYTCHEVA **48** p. 129 pl. i fig. 1.

†*Strophalosia stringocephaloides* **sp. n.** Permian Novaya Zemlya, TSCHERNYSCHEW & LICHAREW in LICHAREW & EINOR Trans. arctic Inst. Leningrad **127** 1939 pp. 62–63 pl. xiii fig. 5.—*S.* cf. *speciosa*, STAINBROOK **52** p. 883 pl. ii fig. 19.

†*Thomasella* **nom. n.** for *Thomasina* Paeckelmann 1931 non von Poche 1908 (mammalia), PAUL Cbl. Min. Geol. Paläont. Stuttgart **B6** 1942 p. 191.

†*Worthenella*, SUTTON **56** p. 464.

ORDER TELOTREMATA.

RHYNCHONELLACEA.

CAMAROTOECHIIDAE.

†*Ancistrorhyncha* gen. n. p. 624 for type *A. costata* sp. n. Ordovician U.S.A. (Tennessee) p. 625 pl. xc figs. 25-27, 30-31, ULRICH & COOPER J. Paleont. Menasha, Wis. 16 1942.

†*Callipleura* nom. n. for *Cyclorhina* Hall & Clarke 1894 non Peters 1871 (mammalia) with type *Rhynchospira nobilis* Hall 1860, COOPER J. Wash. Acad. Sci. 32 1942 p. 228.

†*Camarotoechia cedarensis* sp. n. Devonian U.S.A. (Iowa), STAINBROOK J. Paleont. Menasha, Wis. 16 1942 pp. 611-612 figs. 2a-d pl. lxxxviii figs. 10-15.—*C. litchfieldensis*, CLARK 11 p. 28.—*C. congregata* pl. lxxxiv fig. 12, *depressa* pl. lxxxiv fig. 13, *sappho* pl. lxxxiv fig. 11, STUMM 55.

†*Costellirostra* gen. n. for type *Atrypa peculiaris* Conrad 1841, COOPER J. Wash. Acad. Sci. 32 1942 p. 231.

†*Cyclorhina nobilis*, STUMM 55 pl. lxxxiv fig. 16.

†*Hypothyridina intermedia* p. 612 fig. 5 pl. lxxxviii figs. 5-7 with var. *magniventra* var. n. p. 613 pl. lxxxviii figs. 1-4 Devonian U.S.A. (Iowa), cf. *emmonsii* p. 613 pl. lxxxviii figs. 8-9, STAINBROOK J. Paleont. Menasha, Wis. 16 1942.

†*Leiorhynchus kelloggi* pl. lxxxi figs. 9-10, *laura* pl. lxxxi fig. 11, STUMM 55.

†*Lissopleura* p. 145, CLOUD 14.

†*Paurorhyncha* gen. n. for type *Rhynchonella endlichi* Meek 1875, COOPER J. Wash. Acad. Sci. 32 1942 p. 231.

†*Pugnoides ambigua* p. 883 pl. ii figs. 14-16, 20, sp. p. 883 pl. i figs. 14-18, 20, STAINBROOK 52.

†*Rhynchopora nikitini* var. *arctica* var. n. pp. 64-68 figs. 1-3 pl. xiii figs. 7-10 Permian Russia, cf. *variabilis* p. 68 pl. xiii fig. 6, pl. xiv fig. 2, LICHAREW & EINOR Trans. arctic Inst. Leningrad 127 1939.—*R. arctica*, RYSSUKOV 45 p. 162.

†*Rostricellula* gen. n. p. 625 for type *R. rostrata* sp. n. Ordovician U.S.A. (Tennessee) p. 626 pl. xc figs. 24, 28-29,

32-37, ULRICH & COOPER J. Paleont. Menasha, Wis. 16 1942.

†*Stenocisma* see *Camerophoria*.

†*Torynifer* Hall & Clarke 1894 re-described with type *T. criticus* Hall & Clarke 1894 identified as "*Reticularia*" *pseudolineata* Hall, COOPER 16 pp. 229-230.

†*Trigonirhynchia* nom. n. for *Uncinulina* Bayle 1878 non Terquem 1862 (echinoidea) with type *Uncinulina fallaciosa* Bayle 1878, COOPER J. Wash. Acad. Sci. 32 1942 p. 228.—*T. sulcata* sp. n. Silurian U.S.A. (Indiana), COOPER J. Wash. Acad. Sci. 32 1942 p. 234.

†*Uncinulus tolmani* sp. n. Devonian Canada (Quebec), CLARK Trans. roy. Soc. Can. (3) 36 4 1942 p. 28 pl. i figs. 6-12.

†*Uncinunellina* cf. *wangenheimi*, LICHAREW & EINOR 35 p. 63 pl. xiv fig. 7.

RHYNCHONELLIDAE.

†*Hemithyris psittacea*, HATAI 26 p. 117 pl. viii figs. 5-8, 11.

ATRYPACEA.

ATRYPIDAE.

†*Atrypa devoniana* p. 884 pl. i fig. 24, cf. *rockfordensis* p. 884 pl. ii fig. 3, STAINBROOK 52.—*A. "reticularis"* pl. lxxxiv figs. 38-39, *spinosa* pl. lxxxiv fig. 40, *spiriferoides* pl. lxxxiv fig. 41, STUMM 55.

†*Atrypella shrocki* sp. n. Silurian U.S.A. (Indiana), COOPER J. Wash. Acad. Sci. 32 1942 p. 234.

†*Atrypina imbricata*, CLARK 11 p. 29.

†*Karpinskya*? *fimbriata*, GILL 21 p. 44.

†*Protozeuga* genus discussed, CLOUD 14 p. 145.

COELOSPIRIDAE.

†*Anoplothea flabellites*, HOWELL 30 p. 89 pl. xv figs. 5-6.

†*Pustulina* nom. n. for *Vitulina* Hall 1860 non Swainson 1840 (Gasteropoda) with type *Vitulina pustulosa* Hall 1860, COOPER J. Wash. Acad. Sci. 32 1942 p. 228.

SPIRIFERACEA.

SPIRIFERIDAE.

†*Ambocoelia gregaria*, STAINBROOK 52 p. 885 pl. i figs. 19, 23.—*A. umbonata*, STUMM 55 pl. lxxxii figs. 14–15.

†*Brevispirifer* gen. n. for type *Spirifer gregaria* Clapp in Hall 1857, COOPER J. Wash. Acad. Sci. 32 1942 p. 231.

†*Costispirifer* gen. n. for type *Spirifer arenosus planicostatus* Swartz 1929, COOPER J. Wash. Acad. Sci. 32 1942 p. 232.

†*Dimegelasma* gen. n. for type *Spirifer neglectus* Hall 1858, COOPER J. Wash. Acad. Sci. 32 1942 p. 232.

†*Eospirifer* sp., GILL 21 p. 41 pl. vi figs. 8–9.

†*Fimbrispirifer* gen. n. for type *Spirifer venustus* Hall 1857, COOPER J. Wash. Acad. Sci. 32 1942 pp. 231–232.

†*Licharewia* subgen. n. see *Spirifer*.

†*Martinia* (*Martinia*) cf. *subradiata* p. 154 pl. xxi fig. 7, pl. xxvii fig. 1, sp. p. 155 pl. xxvii figs. 4–5, LICHAREW & EINOR 35.

†*Mentzelia* sp. ?, NEWELL & KUMMEL 40 p. 954 pl. ii fig. 8.

†*Neophricodothyris* p. 156, *asiatica* p. 157 pl. xxvii figs. 3, 6, cf. *elegantula* p. 159 pl. xxvii fig. 9, cf. *waageni* p. 158 pl. xxvii fig. 7, LICHAREW & EINOR 35.

†*Pseudosyrinx kolymaensis* var. *taimyrica* var. n. [nom. nud.] Carboniferous Russia (Taimyr), ANIKEEV & GUSSEV Trans. arctic Inst. Leningrad 140 1939 pp. 32, 118.—*P. kolymaensis* var. *taimyrica* var. n. Permian Russia (Taimyr), EINOR Trans. arctic Inst. Leningrad 135 1939 pp. 90–92 fig. 9 pl. xv fig. 6.—*P. kolymaensis* p. 159 pl. xxvii fig. 2, pl. xxviii fig. 1, ? sp. nov. p. 160 pl. xxviii figs. 6–7, LICHAREW & EINOR 35.

†*Reticularia fimbriata*, STUMM 55 pl. lxxxiv figs. 36–37.

†*Spirifer volongaensis* sp. n. [nom. nud.] Carboniferous Russia (Timan), BARKHATOVA C.R. Acad. Sci. Moscou N.S. 32 9 1941 p. 648.—*S. orientalis* sp. n. Devonian Canada (Quebec), CLARK Trans. roy. Soc. Can. (3) 36 4 1942 pp. 30–31 pl. i figs. 16–19.—*S. condoriformis* pp. 79–81 pl. xiv figs.

8–9, *faba* pp. 112–113 pl. xix fig. 9, *petrenki* pp. 81–82 pl. xv fig. 6, *pseudoholstedahli* pp. 109–110 fig. 12 pl. xix figs. 3–5 spp. n. *pseudomosquensis* pp. 105–108 figs. 9–11 pl. xviii figs. 9–11, pl. xix fig. 1 sp. n. with var. *extensa* var. n. pp. 108–109 pl. xix figs. 2, 7, *alatus* p. 96 pl. xvii figs. 2–3 with var. *nassau* var. n. pp. 97–98 fig. 6 pl. xvii figs. 10–11, aff. *alatus* p. 97 pl. xvii fig. 8, *attenuatus* var. *venusta* var. n. pp. 76–78 pl. xv figs. 3–5, *interplicatus* p. 100 with var. *karmakulensis* var. n. pp. 101–102 fig. 7 pl. xviii fig. 4, *poststriatus* p. 83 pl. xvi fig. 8 with vars. *divisa* pp. 85–87 fig. 4 pl. xvi figs. 5–7, *longiareata* p. 85 vars. n., *attenuatus* var. *venusta* var. n. pp. 76–78 pl. xv figs. 3–5 Permian Novaya Zemlya, EINOR in LICHAREW & EINOR Trans. arctic Inst. Leningrad 127 1939.—*S. occidentalis*, FOSTER 20 p. 249 fig. 1.—*S. bambadhurensis* var. n. p. 92 fig. 5 pl. xvii fig. 1, cf. *fasciger* p. 87 pl. xvi fig. 3, cf. *grewingkii* p. 102 pl. xviii fig. 7, cf. *kharaulakhensis* p. 100 pl. xvii fig. 9, aff. *kimsari* p. 90 pl. xvi fig. 10, cf. *lahuseni* p. 103 fig. 8 pl. xviii figs. 5–6, cf. *moosakhailensis* p. 89 pl. xvi fig. 2, *neostriatus* p. 79 pl. xvi fig. 4, *nitensis* p. 91 pl. xvii figs. 4–7, cf. *ravana* p. 87 pl. xvi fig. 9, cf. *schrenki* p. 104 pl. xviii fig. 8, aff. *striatus* p. 82, cf. *subfasciger* p. 88 pl. xvi fig. 11, cf. *undulatus* p. 98 pl. xviii figs. 2–3, sp. p. 78 pl. xiv fig. 10, sp. indet. p. 99 pl. xviii fig. 1, sp. nov. p. 111 pl. xix fig. 8, LICHAREW & EINOR 35.—*S. cf. mesacostalis* p. 884 pl. ii fig. 25, sp. cf. *orestes* p. 884 pl. ii figs. 9–10, sp. p. 884 pl. ii figs. 9–10, STAINBROOK 52.—“*S.*” *angustus* pl. lxxxiv figs. 30–31, *audaculus* pl. lxxxiv fig. 28, *conso-brinus* pl. lxxxiv fig. 32, *pennatus* pl. lxxxii figs. 4–5, pl. lxxxiv fig. 29 and var. *arkonensis* pl. lxxxii fig. 6, *sculptilis* pl. lxxxiv fig. 33, *venustus* pl. lxxxiv fig. 34, STUMM 55.

†*Spirifer* (*Brachythyris*) *ufensis* p. 114 pl. xx fig. 2 with var. *ufensisformis* var. n. p. 116 pl. xix fig. 6 Permian Novaya Zemlya, *shansiensis* var. nov. p. 116 pl. xx fig. 3, EINOR in LICHAREW & EINOR Trans. arctic Inst. Leningrad 127 1939.

†*Spirifer* (*Choristites*) *anikeevi* sp. n. p. 32 fig. 20, with var. no. 1 p. 32, *fritschii* var. *arctica* var. n. [nom. nud.] pp. 32, 118 Carboniferous Russia (Taimyr peninsula), ANIKEEV & GUSSEV

Trans. arctic Inst. Leningrad 140 1939.—*S. (C.)* pp. 75–79 subgenus discussed, *anikeevi* **sp. n.** pp. 80–83 figs. 6–7 pl. xii fig. 7, pl. xiii figs. 1–4, pl. xiv fig. 4 with var. No. 1 p. 83 pl. xiii fig. 5, *fritschii* var. *arctica* **var. n.** pp. 87–89 pl. xiv fig. 3 Permian Russia (Taimyr), cf. *cinctiformis* p. 85 pl. xiii fig. 6, cf. *priscus* p. 89 pl. xv fig. 1, *subnikitini* p. 84 figs. 8a–b pl. xiv figs. 1–2, pl. xv fig. 2, cf. *ustinovii* p. 79 pl. xii fig. 6, EINOR Trans. arctic Inst. Leningrad 135 1939.—*S. (C.)* p. 119, *barenzi* pp. 123–124 pl. xxi figs. 5–6, *mikradovichii* pp. 121–122 fig. 13 pl. xx fig. 1, pl. xxi fig. 1 **spp. n.** Permian Novaya Zemlya, *fulmari* p. 124 fig. 14 pl. xxi figs. 3–4, cf. *stuckenbergi* p. 120 pl. xxi fig. 2, cf. *ventricosus* p. 122, EINOR in LICHAREW & EINOR Trans. arctic Inst. Leningrad 127 1939.

†*Spirifer* (*Cyrtospirifer*) cf. *disjunctus*, STAINBROOK 52 p. 884 pl. ii figs. 11–13.

†*Spirifer* with *Licharewia* subgen. **n.** pp. 69–70 for type *S. stuckenbergi* Netschayew, cf. *stuckenbergi* p. 73 pl. xii fig. 2, *schrenki* var. *sibirica* **var. n.** pp. 74–75 pl. xii figs. 3–5 Permian Russia (Taimyr), *grewingki* p. 71 pl. xi figs. 4–5, *lahuseni* p. 73 pl. xii fig. 1, cf. *rugulatus* p. 70 pl. xi figs. 6–7, EINOR Trans. arctic Inst. Leningrad 135 1939.—*S. (L.) schrenki* var. *sibirica* **var. n.** p. 32 fig. 20 Carboniferous Russia (Taimyr peninsula), ANIKEEV & GUSSEV Trans. arctic Inst. Leningrad 140 1939.

†*Spirifer* (*Paeckelmanella*) *expansus* var. *wimani*, LICHAREW & EINOR 35 p. 117 pl. xx fig. 4.

†*Spirifer* (*Spirifer*) *gussevi*, *pseudotasmaniensis* **spp. n.** [nom. nud.] pp. 32, 118, *poststriatus* var. *taiyrica* **var. n.** [nom. nud.] pp. 32, 118 Carboniferous Russia (Taimyr), ANIKEEV & GUSSEV Trans. arctic Inst. Leningrad 140 1939.—*S. (S.)* p. 51, *gussevi* pp. 66–67 pl. xi figs. 2–3, *pseudotasmaniensis* var. pp. 64–65 pl. x fig. 4 **spp. n.**, *chaoi* p. 61 figs. 3–5 pl. x figs. 1–3, *poststriatus* var. *taiyrica* **var. n.** pp. 51–55 figs. 1a–b pl. viii figs. 1–4 Permian Russia (Taimyr), sp. aff. *postventricosus* p. 65 pl. x fig. 5, *subfasciger* p. 55 pl. viii fig. 7, *taiyuanensis* p. 58 fig. 2 pl. viii fig. 5, pl. ix figs. 2–3 with var. *tareiaensis* **var. n.** p. 60 pl. viii fig. 6, pl. ix fig. 1, sp. aff. *taiyuanensis* p. 60 pl. ix figs. 4–5, sp. nov. No. 1 p. 67 pl. x fig. 6,

sp. No. 1 p. 68 pl. xi fig. 1, EINOR Trans. arctic Inst. Leningrad 135 1939.

†*Spirifer* (*Spiriferella*) discussed pp. 126–128, *editiarcatus* **sp. n.** pp. 152–154 figs. 16–17 pl. xxv fig. 8, pl. xxvi figs. 1–4 with var. *shevtchenki* **var. n.** p. 154 pl. xxv figs. 7, 9, pl. xxvi fig. 5, *keilhavi* p. 139 pl. xxiii figs. 6–7, pl. xxiv figs. 1–9 with vars. *altisinuata* pp. 142–143 pl. xxiv fig. 2, *ordinaria* pp. 140–142 pl. xxiii figs. 6–7, pl. xxiv fig. 1, *pseudodraschei* pp. 145–147 pl. xxiv figs. 6–9 **vars. n.** and var. *sulcifer* p. 143 pl. xxiv figs. 4–5, *saranan* s.l. pp. 128–133 fig. 15 pl. xxii figs. 1–7, pl. xxiii figs. 1–5, *saranan* s.s. p. 133 pl. xxii fig. 1 with var. *pseudosaranan* **var. n.** pp. 136–138 pl. xxii fig. 6, pl. xxiii fig. 1 Permian Novaya Zemlya, and vars. *arctica* p. 135 pl. xxii figs. 4–5, *polaris* p. 134 pl. xxii figs. 2–3 and *wimani* p. 138 pl. xxii fig. 7, pl. xxiii figs. 2–5, *rajah* p. 147 pl. xxv figs. 1–5 with vars. *keihaviformis* p. 148 pl. xxv figs. 3, 5, *magna* p. 149 pl. xxv fig. 2 and *sarananiformis* p. 149 pl. xxv figs. 1, 4, *samoylewitschi* p. 149 pl. xxvi figs. 6–7, LICHAREW & EINOR Trans. arctic Inst. Leningrad 127 1939.

†*Tylothyrus* sp., STAINBROOK 52 p. 885 pl. ii fig. 8.

SPIRIFERINIDAE.

†*Cyrtina iowaensis*, STAINBROOK 52 p. 885 pl. ii figs. 5–6.—*C. hamiltonensis*, STUMM 55 pl. lxxxix figs. 7–8, pl. lxxxix fig. 35.

†*Cyrtinopsis perlamellosus*, GILL 21 p. 42 pl. vi figs. 6–7.

†*Spiriferina* p. 162, cf. *cristata* p. 162 pl. xxviii fig. 2, ? *hoeferiana* p. 164 pl. xxviii fig. 5, cf. *multiplicata* p. 163 pl. xxviii figs. 3–4, LICHAREW & EINOR 35.—*S. mansfieldi*, NEWELL & KUMMEL 40 p. 953 pl. ii fig. 9.

†*Spondylospira* **gen. n.** p. 232 for type *S. reesidei* **sp. n.** p. 232 Trias U.S.A. (Idaho), COOPER J. Wash. Acad. Sci. 32 1942.

ROSTROSPIRACEA.

MERISTELLIDAE.

†*Camarospira* sp. A pl. lxxxix fig. 43, sp. B pl. lxxxix fig. 44, STUMM 55.

†*Charionella* ? *nortoni* **sp. n.** Devonian U.S.A. (Iowa), STAINBROOK J. Paleont. Menasha, Wis. 16 1942 p. 619 figs. 4a–h pl. lxxxix figs. 39–42.

†*Cryptothyrella* **gen. n.** for type *Whitfieldella quadrangularis* Foerste 1906, COOPER J. Wash. Acad. Sci. **32** 1942 p. 233.

†*Meristella belloides* **sp. n.** Devonian Canada (Quebec), CLARK Trans. roy. Soc. Can. (3) **36** 4 1942 p. 31 pl. i figs. 20–22.—*M. goldringae* **sp. n.** Devonian U.S.A. (N.Y.), HOWELL Bull. New York St. Mus. Albany **327** 1942 p. 89 pl. xv fig. 8.—*M. parva*, STAINBROOK **53** p. 618 figs. 3a–c pl. lxxxix figs. 43–46.

†*Nucleospira parva* **sp. n.** Devonian U.S.A. (N.Y.), HOWELL Bull. New York St. Mus. Albany **327** 1942 p. 89 pl. xv fig. 7.—*N. cf. marginata*, GILL **21** p. 43 pl. iv fig. 5, pl. v fig. 6.

†*Pentagonia bicostata*, STUMM **55** pl. lxxxiv fig. 46.

RHYNCHOSPIRINIDAE.

†*Parazyga hirsuta*, STUMM **55** pl. lxxxiv fig. 45.

†*Plectospira* **nom. n.** for *Ptychospira*, Hall & Clarke 1894 non Slavik 1869. (gasteropoda) with type *Terebratula ferita* von Buch 1834, COOPER J. Wash. Acad. Sci. **32** 1942 p. 228.

†*Trigeria* Bayle 1878 a synonym of *Retzia* King 1850, CLOUD **14** p. 119.

ATHYRIDAE.

†*Athyris cedarensis* p. 618 pl. lxxxix figs. 25–31, *nettilerothi* p. 617 pl. lxxxix figs. 23–24, *zonulata* p. 617 pl. lxxxix figs. 32–38 **spp. n.** Devonian U.S.A. *vittata* p. 616 pl. lxxxix figs. 19–22 with vars. *brandonensis* p. 616 pl. lxxxix figs. 13–18, *buffaloensis* p. 616 pl. lxxxix figs. 7–12 and *randalia* p. 616 pl. lxxxix figs. 1–6 **vars. n.** Devonian U.S.A. (Iowa), STAINBROOK J. Paleont. Mem. nashua, Wis. **16** 1942.—*A. spiriferoides* pl. lxxxi figs. 12–13 pl. lxxxiv fig. 41, *vittata* pl. lxxxiv fig. 42, STUMM **55**.

†*Athyris* (*Cleiothyridina*) *capillata* var. *sibirica* **var. n.** [nom. nud.] Carboniferous Russia (Taimyr), ANIKEEV & GUSSEV Trans. arctic Inst. Leningrad **140** 1939 pp. 32, 118.—*A. (Cleiothyridina) capillata* var. *sibirica* **var. n.** pp. 94–96 figs. 10a–b pl. xv figs. 7–10 Permian Russia (Taimyr), cf. *gerardi* p. 93 pl. xv figs. 4–5, EINOR Trans. arctic Inst. Leningrad **135** 1939.

†*Athyris* (*Composita*) *ambigua* var. *abrossimovens* **var. n.** Permian Novaya

Zemlya, EINOR in LICHAREW & EINOR Trans. arctic Inst. Leningrad **127** 1939 pp. 165–166 pl. xxviii figs. 9–11.—*C. mexicana*, CLIFTON **12** p. 690 pl. cii figs. 16–17.

TEREBRATULACEA.

CENTRONELLIDAE.

Centronellidae, family discussed, CLOUD **14** pp. 43–45.

Amphigeniinae **subfam. n.** of Centronellidae with genus *Amphigenia*, CLOUD Spec. Papers geol. Soc. Amer. Washington **38** 1942 p. 77.

†*Amphigenia* p. 77, *elongata* p. 78 pl. ix figs. 19–20, pl. x figs. 1–11, sp. pl. ix fig. 18, CLOUD **14**.

†*Beachia* genus discussed pp. 60–61 fig. 7, *suessana* p. 62 pl. vi figs. 1–16, *thunii* pl. vi figs. 17–20, CLOUD **14**.

†*Centronella* p. 71, *campbelli* p. 76 pl. viii figs. 28–30, pl. ix figs. 10–17, *cooperi* pp. 76–77 pl. ix figs. 1–9 **spp. n.** Devonian U.S.A., *glansfagea* p. 75 pl. viii figs. 18–25, cf. *tumida* pl. viii figs. 26–27, CLOUD Spec. Papers geol. Soc. Amer. Washington **38** 1942.

†*Enantiosphen* genus discussed p. 144, *vicaryi* p. 144 pl. xxvi figs. 4–7, CLOUD **14**.

†*Etyothyris* **gen. n.** p. 59 for type *Rensselaeria ovoides gaspensis* Clarke 1907 p. 59 pl. v figs. 11–19, CLOUD Spec. Papers geol. Soc. Amer. Washington **38** 1942.

Eurythyridae [sic, err. typ. for Eurythyridae, cf. p. 29 ?] **subfam. n.** of Centronellidae with genera *Beachia*, *Eurythyris* and *Prionothyris*, CLOUD Spec. Papers geol. Soc. Amer. Washington **38** 1942 p. 60.

†*Eurythyris* **gen. n.** p. 63 for type *Oriskania lucerna* Schuchert 1913 p. 64 pl. vi figs. 21–29, pl. vii figs. 1–4, *dunbari* **sp. n.** pp. 65–66 pl. vii figs. 5–11 Devonian U.S.A., CLOUD Spec. Papers geol. Soc. Amer. Washington **38** 1942.

†*Nanothyris* **gen. n.** p. 45 figs. 7_{1–2} for type *Meganteris mutabilis* Hall 1857 p. 47 pl. iii figs. 1–12, *porterae* pp. 49–50 pl. iii figs. 14–20, *reesidei* p. 49 pl. iii figs. 21–22, 24–26 **spp. n.** Silurian–Devonian U.S.A., CLOUD Spec. Papers geol. Soc. Amer. Washington **38** 1942.

†*Oriskania* p. 69, *navicella* p. 70 pl. viii figs. 1-10, 13-14, *sinuata* pl. viii figs. 11-12, 15-17, CLOUD 14.

†*Prionothyris* gen. n. p. 66 for type *P. perovalis* sp. n. pp. 67-68, pl. vii figs. 14-31 Devonian U.S.A., *condoni* pl. vii fig. 13, *saffordi* pl. vii fig. 12, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942.

†*Rensselaerina* p. 50, *haraganana* pp. 52-53 pl. iv figs. 1-7, 17-20, *levenae* pp. 53-54 pl. iv figs. 8-14 spp. n. Silurian-Devonian U.S.A., *medioplicata* p. 51 pl. iii figs. 27-37, pl. iv figs. 15-16, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942.

†*Rensselaeria delicatula* sp. n. p. 29 pl. i figs. 13-15 Devonian Canada (Quebec), cf. *subglobosa* p. 28, CLARK Trans. roy. Soc. Can. (3) 36 4 1942.—*R.* p. 54 figs. 7₃₋₄, *elongata* p. 57 pl. iv figs. 21-24, *marylandica* p. 58 pl. v figs. 1-9, CLOUD 14.

†*Trigeria* see entry under Rhynchospiriniidae.

STRINGOCEPHALIDAE.

Bornhardtiniinae subfam. n. of Stringocephalidae with genus *Bornhardtina*, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942 p. 100.

†*Bornhardtina* p. 100, *onychophora* p. 104 pl. xvi figs. 6-8, *uncitoides* selected as genotype p. 101 fig. 11 pl. xvi figs. 1-4, sp. pl. xvi fig. 5, CLOUD 14.

†*Chascothyris* p. 99, *barroisi* p. 100 pl. xv figs. 2-7, CLOUD 14.

†*Denckmanella* Schuchert and LeVene 1929 a synonym of *Rensselandia* Hall 1867, CLOUD 14 p. 96.

†*Denckmannia* Holzapfel 1912 (non *Denckmannia* Buckman 1898) a synonym of *Rensselandia* Hall 1867, CLOUD 14 pp. 96-97.

†*Newberria* Hall 1891 a synonym of *Rensselandia* Hall 1867, CLOUD 14 p. 96.

†*Rauffia* Schulz 1914 (pars) a synonym of *Bornhardtina* Schulz 1914, CLOUD 14 p. 102.

Rensselandiinae subfam. n. of Stringocephalidae with genera *Rensselandia*, *Subrensseudia* and *Chascothyris*, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942 p. 92.

†*Rensselandia* p. 94, *gibbosa* sp. n. p. 99 pl. xiv figs. 5-9 Devonian Germany, *circularis* pl. xv fig. 1, *cordiforme* pl. xiv fig. 4, *johanni* p. 98 pl. xiii figs. 9-16, pl. xiv figs. 1-3, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942.

†Stringocephalinae subfam. n. of Stringocephalidae, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942 p. 104.

†*Stringocephalus* p. 104, *burtini* p. 107 pl. xvii figs. 3-6, pl. xviii figs. 1, 4, 6-7, *obesus* pl. xvii fig. 1, sp. pl. xvii fig. 2, pl. xviii figs. 2-3, 5, CLOUD 14.

†*Subrensseudia* gen. n. p. 92 for type *Newberria claypolii* Hall 1891 p. 93 pl. xiii figs. 1-8 Devonian U.S.A., CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942.

MEGANTERIDAE.

†*Megalanteris* Oehlert 1887 a synonym of *Meganteris* Suess 1855, CLOUD 14 p. 110.

†*Meganteris* p. 109, *suessi* p. 111 pl. xix figs. 1-2, 5-8, cf. *suessi* pl. xix figs. 3-4, CLOUD 14.

DIELASMATIDAE.

Brachyzyginae subfam. n. of Dielasmatidae, CLOUD Spec. Papers geol. Soc. Amer. Wasaington 38 1942 p. 113.

†*Brachyzyga* p. 113, *pentameroides* p. 113 pl. xx figs. 1-5, CLOUD 14.

†*Brasilia* Clarke 1913 a synonym of *Paranaia* Clarke 1913, CLOUD 14 pp. 122-123.

†*Brasilica* Greger 1920 a synonym of *Paranaia* Clarke 1913, CLOUD 14 p. 123.

†*Brasilina* Clarke 1921 a synonym of *Paranaia* Clarke 1913, CLOUD 14 p. 123.

†*Chapadella* Greger 1920 a synonym of *Paranaia* Clarke 1913, CLOUD 14 p. 122.

†*Cranaena* p. 132, *schucherti* sp. n. pp. 139-140 pl. xxiii figs. 24-31, pl. xxiv fig. 1 Devonian Germany, cf. *amygdaloidea* pl. xxiv figs. 14-15, *casei* pl. xxiv figs. 28-29, 31-32, *iowensis* pl. xxiv figs. 24-25, cf. *lincklaeni* pl. xxiv figs. 17-23, *praecursor* p. 136 fig. 17, *radiata* pl. xxiv fig. 30, *romingeri* p. 138 pl. xxiv figs. 2-13, *sullivanti*

p. 134 fig. 16, *thomasi* pl. xxiv fig. 33, aff. *sulcata* pl. xxiv fig. 16, sp. ? pl. xxiv figs. 26-27, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942.—*C. romingeri* pl. lxxxiv figs. 19-21, sp. pl. lxxxiv fig. 22, STUMM 55.

†*Cranaenella* Fenton and Fenton 1924 a synonym of *Cranaena* Hall and Clarke 1893, CLOUD 14 p. 134.

Cranaeninae subfam. n. of Dielasmatidae with genera *Cranaena* and *Hamburgia*, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942 p. 131.

†*Cryptonella* p. 127, *reimanni* sp. n. p. 130 pl. xxiii figs. 9-18 Devonian U.S.A. (N.Y.), *melonica* pl. xxiii figs. 20-21, *planirostra* p. 131 pl. xxii figs. 16-20, pl. xxiii figs. 1-8, *reimanni* pl. xxiii figs. 9-18, sp. aff. *attenuata* pl. xxiii fig. 19, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942.—*C. planirostris*, STUMM 55 pl. lxxxi fig. 18.

†*Derbyina* p. 120, *smithi* p. 121 pl. xxi figs. 1-8, CLOUD 14.

†*Dielasma* cf. *millepunctatum*, EINOR 18 p. 96 pl. xv figs. 11-12.—*D. elongatum* p. 166 pl. xxviii fig. 8, *fusiformis* p. 169 pl. xxviii fig. 15, *moelleri* p. 169 pl. xviii figs. 13-14, *subelongatum* p. 168 pl. xxviii fig. 12, LICHAREW & EINOR 35.

†*Eunella* Hall and Clarke 1893 a synonym of *Cranaena* Hall and Clarke 1893, CLOUD 14 p. 134.—*E. attenuata*, STUMM 55 pl. lxxxiv figs. 23-24.

†*Hamburgia* p. 140, *typa* p. 141 pl. xxv figs. 1-6, *morsii* pl. xxv figs. 11-13, *vera* pl. xxv figs. 7-9, sp. pl. xxv fig. 10, CLOUD 14.

†*Mendathyris* gen. n. p. 125 for type *Rensselaeria mainensis* p. 126 pl. xxii figs. 1-15 Devonian U.S.A. (Maine), CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942.

Mutationellinae subfam. n. of Dielasmatidae with genera *Podolella*, *Mutationella*, *Derbyina*, *Paranaia*, *Pleurothyris* and *Mendathyris*, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942 p. 114.

†*Mutationella* p. 116, *podolica* p. 118 figs. 14-15 pl. xx figs. 11-21, CLOUD 14.—*M. ?* cf. *Trigleria guerangeri* sp. A

pl. xx fig. 23, sp. B pl. xx figs. 24-29, CLOUD 14.

†*Oliveirella* Oliveira 1934 a synonym of *Paranaia* Clarke 1913, CLOUD 14 p. 123.

†*Paranaia* p. 122, *margarida* p. 122 pl. xxi figs. 9-14, CLOUD 14.

†*Plectoconcha* gen. n. for type *Rhynchonella aequiplicata* Gabb 1864, COOPER J. Wash. Acad. Sci. 32 1942 p. 233.

†*Pleurothyris* gen. n. p. 123 for type *Rensselaeria stewarti* p. 123 pl. xxi figs. 15-29 Devonian Canada, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942.

†*Podolella* p. 114, *eurydice* pl. xx figs. 8-10, *rensselaeroides* p. 115 figs. 12-13 pl. xx figs. 6-7, CLOUD 14.

†*Stuartella* Belanski 1929 a synonym of *Hamburgia* Weller 1911, CLOUD 14 p. 141.

RHIPIDOTHYRIDAE.

Rhipidothyridae fam. n. with genera *Prorensselaeria*, *Globithyris*, *Rhenorenselaeria*, *Rhipidothyris* and *Septothyris*, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942 p. 80.

Globithyrinae subfam. n. of Rhipidothyridae with genera *Prorensselaeria*, *Globithyris* and *Rhenorenselaeria*, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942 p. 81.

†*Globithyris* gen. n. p. 82 for type *Rensselaeria callida* CLARKE 1907 p. 84 pl. xi figs. 5-8, 10-14 Devonian U.S.A., *diania* pl. xi fig. 9, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942.

†*Prorensselaeria* p. 81, *nylanderi* p. 82 pl. xi figs. 1-4, CLOUD 14.

†*Rhenorenselaeria* p. 85, *stringiceps* p. 86 pl. xii figs. 1-12, CLOUD 14.

Rhipidothyridinae subfam. n. of Rhipidothyridae with genera *Rhipidothyris* and *Septothyris*, CLOUD Spec. Papers geol. Soc. Amer. Washington 38 1942.

†*Rhipidothyris* p. 87, *plicata* p. 88 fig. 8 pl. xii figs. 17-19, *lepida* p. 88 fig. 9 pl. xii figs. 20-23, CLOUD 14.

†*Septothyris* p. 90, *septata* p. 91 fig. 10 pl. xii figs. 13-16, CLOUD 14.—*S.*

Cooper & Williams 1935 with *S. septata*
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Japan, HATAI Japan. J. Geol. Geogr.
Tokyo 18 1941 p. 118 pl. viii figs. 1-4.

†*Oleneothyris* gen. n. for type *Tere-*
bratula harlani Morton 1829. COOPER
J. Wash. Acad. Sci. 32 1942 p. 233.

†*Terebratula margaritowi*, NEWELL &
KUMMEL 40 p. 954 pl. ii figs. 5a-b.

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†*Choristothyris* gen. n. for type *Tere-*
bratula plicata Say 1820, COOPER J.
Wash. Acad. Sci. 32 1942 p. 233.

Laqueus californicus, HOBBS & CLOUD
in CLOUD 14 pp. 23-25 pl. i figs. 1-4,
pl. ii figs. 1-4.

INCERTAE SEDIS.

†*Scaphiocoelia* genus discussed p. 142,
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†*Selenella* Hall and Clarke 1893,
CLOUD 14 p. 71.

8. BRYOZOA (POLYZOA).

BY

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II.—SUBJECT INDEX.

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Entalophora delicatula, OSBURN 20 p. 330.

†*Fistulipora* cf. *sinensis*, SMITH 25 p. 17.—*F. ? bassleri* **sp. n.** Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 p. 419.—*F. sp.*, CLIFTON 5 p. 689.

Lichenopora buski, OSBURN 20 p. 334.

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†*Atactoporella bellula* **sp. n.** Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 p. 420.

†*Batostoma chapparsi, cumingsi* **spp. n.** *B. winchelli*, Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 pp. 431–432.

†*Cyphotrypa (?) shearsbyi* **sp. n.** Devonian Australia, CROCKFORD J. Roy. Soc. N.S.W. 75 1942 p. 105.

†*Dekayella praenuntia* var. *echinata*, LOEBLICH 14 p. 426.

†*Eridotrypa abrupta* **sp. n.** Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 p. 429.

†*Hallopora dubia, macrostoma pachymura* **spp. n.** Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 pp. 430–431.

†*Hemiphragma pulchra* **sp. n.** *H. irrasum*, Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 pp. 434, 433.

†*Heterotrypa taffi* **sp. n.** Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 p. 427.

†*Homotrypa callitoecha, multitabulata, sagittata, ulrichi* **spp. n.** Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 pp. 420–422.

†*Mesotrypa favosa, tubulifera* spp. n. Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 pp. 422-423.

†*Monticuliporella croneisi, peculiaris, shideleri* spp. n. Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 pp. 423-425.

†*Nicholsonella irregularis, moniliformis* spp. n. *N. laminata*, Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 pp. 428-429.

†*Prasopora fritzae* sp. n. Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 p. 426.

†*Stromatotrypa frondosa* sp. n. Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 p. 434.

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†*Eostenopora? klochensis* sp. n. Palaeozoic Canada, FRITZ Trans. Canad. Inst. Toronto 24 1942 p. 167.—*E. rugosa* sp. n. Upper Devonian, Iowa, McNAIR J. Paleont. Menasha, Wis. 16 1942 p. 350.

†*Fenestrellina mouara* sp. n. Devonian Australia, CROCKFORD J. Roy. Soc. N.S.W. 75 1942 p. 107.—*F. cooperi*, *irregularis* spp. n. Upper Devonian, New York U.S.A., McNAIR J. Paleont. Menasha, Wis. 16 1942 p. 344.

†*Glyptopora pustulifera* sp. n. Carboniferous Kentucky & Illinois U.S.A., McFARLAN J. Paleont. Menasha, Wis. 16 1942 p. 455.

†*Hyalotoechus* gen. n. (Heterotrypidae) p. 348, genotype *H. duncani* sp. n. Upper Devonian, New York, U.S.A. p. 349, *H. minimus*, *elleri* spp. n. Upper Devonian, New York U.S.A., pp. 348, 349, McNAIR J. Paleont. Menasha, Wis. 16 1942.

†*Lyropora spinifera* sp. n., *L. ranosculum*, *subquadrans*, p. 448, *L. plana*

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†*Orthopora ? magna*, *O. ? acuta*, spp. n. Upper Devonian, New York U.S.A., McNAIR J. Paleont. Menasha, Wis. 16 1942 pp. 347, 348.

†*Pachydietya bromidensis* sp. n. Ordovician Oklahoma U.S.A., LOEBLICH J. Paleont. Menasha, Wis. 16 1942 p. 435.

†*Penniretepora lobata* sp. n. Silurian Australia, CROCKFORD J. Roy. Soc. N.S.W. 75 1942 p. 110.

†*Pesnastylus* gen. n. (Arthrostylidae) genotype *P. humei* sp. n. Silurian Australia, CROCKFORD J. Roy. Soc. N.S.W. 75 1942 p. 111.

†*Polypora*, species grouped, *P. multi-spinosa*, *nodolinearis* spp. n. *P. tuberculata*, Carboniferous Kentucky & Illinois U.S.A., McFARLAN J. Paleont. Menasha, Wis. 16 1942 p. 445.—*P. bassleri* sp. n. Upper Devonian, New York U.S.A., McNAIR J. Paleont. Menasha, Wis. 16 1942 p. 345.—*Poly-pora* sp., CLIFTON 5 p. 689.

†*Pseudohornera (?) retiformis* sp. n. Silurian Australia, CROCKFORD J. Roy. Soc. N.S.W. 75 1942 p. 106.

†*Rhombopora millepuncta* sp. n., *R. millepuncta* var. *recta* var. n., Carboniferous Illinois, U.S.A., McFARLAN J. Paleont. Menasha, Wis. 16 1942 pp. 454, 455.

†*Semicosciniium vallatum* sp. n. Devonian Australia, CROCKFORD J. Roy. Soc. N.S.W. 75 1942 p. 107.—*S. flabelulum* sp. n. Upper Devonian, New York, U.S.A., McNAIR J. Paleont. Menasha, Wis. 16 1942 p. 345.

†*Septopora*, synopsis of species in Chester formation, McFARLAN 15 p. 454.

†*Stereotoechus irregularis* sp. n. Upper Devonian, Iowa, U.S.A., McNAIR J. Paleont. Menasha, Wis. 16 1942 p. 349.

†*Sulcoretepora willardi*, *chadwicki* spp. n. Upper Devonian, Pennsylvania and New York, U.S.A., McNAIR J. Paleont. Menasha, Wis. 16 1942 p. 346.

S. labiosa var. *aligera* var. n. Carboniferous Kentucky, U.S.A., McFARLAN J. Paleont. Menasha, Wis. 16 1942 p. 455.

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9. MOLLUSCA.

BY

A. E. SALISBURY, A.M.I.E.E.

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Note.—The arrangement here used follows, in general, that of Thiele's *Handbuch*. The most important differences are that Epitoniacea and Pyramidellacea are placed immediately preceding Muricacea in order of grouping, and the families Triviidae and Eratoidae are placed in Lamellariacea.

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†*Vanuxemia calveri* sp. nov. Middle Ordovician, Trenton, Escanaba R. near Cornell, Michigan, R. C. HUSSEY, Pap. Mich. Acad. Sci. 26 1941 p. 446, pl. i f. 11-13.

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†*Vetulonaea faberi* **sp. nov.** Morrison formation [Jurassic] Ladder Canyon road 6 m. S. of Grand Junction, Colorado, E. L. HOLT J. Paleont. Menasha, Wis. 16 4 1942 p. 459 pl. lxix.

†*Vetuloniaia faberi* **sp. nov.** Morrison formation [Jurassic] Grand River Valley,

Colorado, E. L. HOLT Univ. Colo. Stud. 26A 3 1940 p. 55.

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Alcadia lewisi **sp. nov.** Halfway across bluff, bush road behind Stakes Bay, Cayman Brac, H. A. PILSBRY *Nautilus* 56 1 1942 p. 4; pl. i f. 4.

Helicina terryae Chiriqui Province, Panama **sp. nov.**, H. A. REHDER J. Wash. Acad. Sci. 32 11 1942 p. 350 fig. 16.

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- Aperostoma (Austrocyclotus) grenadense mcsweeni* Grenada **subsp. nov.**, P. BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942 p. 135 pl. xviii f. 22-24.
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Aperostominae **subfam. nov.** with genera *Crocidopoma*, *Cyclojamaicia*, *Cycloendresia*, *Cyclopilsbrya*, *Ptychocochlis*, *Siracyclotus*, *Poteria*, *Aperostoma*, TORRE & BARTSCH U.S. Nat. Mus. Bull. **181** Washington 1942 pp. 3, 4, 38.

Austrocyclotus **subgen. nov.** of *Aperostoma* Cyclophoridae type *Aperostoma* (*Austrocyclotus*) *stramineum* (Reeve), P. BARTSCH U.S. Nat. Mus. Bull. **181** Washington 1942 p. 132.

Barbacyclus **gen. nov.** of Amphicyclotinae Cyclophoridae type *Cyclophorus underwoodi* Da Costa, Costa Rica, P. BARTSCH & J. E. P. MORRISON U.S. Nat. Mus. Bull. **181** Washington 1942 p. 175 pl. xxiii f. 7-9.

Buckleyia bicincta Ecuador **sp. nov.**, P. BARTSCH & J. E. P. MORRISON U.S. Nat. Mus. Bull. **181** Washington 1942 p. 152 pl. xix f. 13-15.

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Calaperostoma pittieri **sp. nov.** Panama p. 164 pl. xxi f. 7-9; *C. leai* **nom. nov.** p. 165 pl. xxi f. 17-19 for *Cyclostoma striata* Lea Trans. Amer. Phil. Soc. 1834 5 p. 196 pl. xix f. 77; not *C. striatum* Sowerby Tankerville Catal. 1825 p. 41; or *C. striata* Quoy & Gaimard Voy. l'Astrolabe Zool. 2, p. 186 1832, P. BARTSCH & J. E. P. MORRISON U.S. Nat. Mus. Bull. **181** Washington 1942.

Campeloma trapping snails, L. N. ALLISON 8.

Crocidopoma (*Cyclocubana*) *perdistinctum toroense* Monte Toro, Guantánamo, Oriente Province p. 40 pl. xviii f. 10-12; *Cr. (Cy.) gundlachi gundlachi* Monte Torro p. 42 pl. viii f. 1-3; *Cr. (Cy.) gundlachi wrighti* Potosi (N. of Monte Libano and Felicidad) p. 42 pl. viii f. 4-6; **subsp. nov.** Cuba, TORRE & BARTSCH U.S. Nat. Mus. Bull. **181** Washington 1942.—*Cr. (Cy.) gundlachi* **sp. nov.** Monte Toro, Oriente Province, TORRE & BARTSCH U.S. Nat. Mus. Bull. **181** Washington 1942 p. 41, pl. viii f. 1-3; *Cr. (Crocidopoma) vortex* elevatum top of Mount Roekelais p. 64 pl. xi f. 16-18; *C. (C.) milleri* slope of Loma de Cielo, Bohoruco Mountains 3,000 ft. Dominica p. 66 pl. xii f. 1-3; *C. (C.) orcutti* Jimbi Mountain, S.-W. part of southern peninsula of Haiti p. 66 pl. xii f. 36-38 **subsp. nov.**; *C. (C.) abbotti* **sp. nov.** Polo, Bohoruco Mts. 2,000 ft. Dominica p. 67 pl. xii f. 13-15 West Indies, P. BARTSCH U.S. Nat. Mus. Bull. **181** Washington 1942.

Cycladamsia **subgen. nov.** of *Aperostoma*, *Aperostominae*, Cyclophoridae, type. *Cyclostoma seminudum* C. B. Adams, Western Jamaica, P. BARTSCH U.S. Nat. Mus. Bull. **181** Washington 1942 p. 125 pl. xviii f. 32-34 pl. xlii f. 4, 5.

Cyclobakeria **subgen. nov.** of *Poteria* Cyclophoridae, type *Cyclotus novae-spei* Chitty **subgen.** is confined to the two ends of the Island of Jamaica p. 115 pl. xvi f. 13-15, P. BARTSCH U.S. Nat. Mus. Bull. **181** Washington 1942.

Cycloblandia **subgen. nov.** of *Amphicyclotulus*, Cyclophoridae, type *Cyclostoma beauriana* Petit 1853, = *Cyclostoma inornata* Redfield 1854, P. BARTSCH U.S. Nat. Mus. Bull. **181** Washington 1942 p. 60 pl. xi f. 10-12.

Cyclocaymania **subgen. nov.** of *Cyclopilsbrya* Cyclophoridae, type *Poteria caymanensis* Pilsbry Georgetown, Grand Cayman, P. BARTSCH U.S. Nat. Mus. Bull. **181** Washington 1942 p. 79 pl. xiii f. 7-9, 10-12 type.

Cyclocubana **subgen. nov.** of *Crocidopoma*, type *Cyclotus perdistinctus* Gundlach, TORRE & BARTSCH U.S. Nat. Mus. Bull. **181** Washington 1942 pp. 39, 40 pl. viii f. 13-15.

Cyclohaitia gen. nov. of Amphicyclotinae Cyclophoridae, type *Cyclohaitia haitia* sp. nov. Tiburon, Haiti, BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942 pp. 52, 53, pl. x f. 12-14.

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Cyclovendreysia gen. nov. of *Aperostominae*, Cyclophoridae, type *Cyclostoma dubiosum* C. B. Adams, Jamaica, P. BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942 p. 69 pl. xii f. 4-6.

Cyclopomops [sic! *Cyclopomops* later in text] nom. nov. for *Cyclopoma* Troschel, Arch. Naturg. 13, p. 381, 1847 (not *Cyclopoma* Agassiz Recherches . . poissons foss. . . 4 p. 17, 1833) type *Aperostoma* (*Cyclopomops*) *moriciandi* (Pfeiffer) Bahia, Brazil p. 219 pl. xl f. 7-9, P. BARTSCH & J. E. P. MORRISON U.S. Nat. Mus. Bull. 181 Washington 1942.

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MORRISON U.S. Nat. Mus. Bull. 181 Washington 1942.

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f. 1-3; *F. (F.) guanense lagunillense* Lagunillas, district of San Juan Martinez, Pinar del Río Province p. 38 pl. vii f. 19-21; **subsp. nov.** Cuba, TORRE & BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942.—*F. (Neopupina)* key to species, BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942 p. 44.

Farcimoides **gen. nov.** Megalomastominae, Cyclophoridae, type *Cyclostoma orbignyi* Pf., P. BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942 p. 46 pl. 9 f. 4-6.—*F. sallei* (= *Cyclostoma orbignyi* var. 7 Pfeiffer Pro. Zool. Soc. London vol. 19 p. 149 1851 = *C. orbignyi* var. 2. Pfeiffer Martini Chemnitz Couch. Cab. 1, sec. 19 p. 272 pl. xxxvii f. 5, 6, 1863) type from El Río, Dominican Republic and elevation of 4,000 ft. p. 46, pl. ix f. 29-31; *F. dominicensis* Dominican Republic p. 47, p. ix f. 1-3; **spp. nov.**, BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942.

Filocyclus **gen. nov.** of Amphicyclotinae Cyclophoridae, type *Cyclophorus delphinulus* Mousson, P. BARTSCH & J. E. P. MORRISON U.S. Nat. Mus. Bull. 181 Washington 1942 p. 157 pl. xix f. 10-12.

“*Incerticyclus*” “a pseudogeneric term” under which designation are placed *Incerticyclus distinctus* Sowerby, *Incerticyclus connivens* (H. Adams); *Incerticyclus cayennensis* (Shuttleworth) *Incerticyclus duffianus* (C. B. Adams), *Incerticyclus braziliensis* (Gray), *Incerticyclus prominulus* (Orbigny), *Incerticyclus gayi* (Hupé) figs., P. BARTSCH & J. P. E. MORRISON [As “*Incerticyclus*” is merely a term without type it has no standing].—“*Incerticyclus*” “a pseudogeneric term . . not to be considered a genus, nor is it ever to have a type, but to remain an open catchall.” The author places the following species in his “catchall”: *Incerticyclus*, †*I. bakeri* (Simpson) = *Neocyclotus (Ptychocochlis) bakeri*; †*I. bowdenensis* **sp. nov.** miocene formation Bowden Jamaica; p. 138; †*I. schermoi* miocene beds, Bowden Jamaica p. 138; *I. perpallidus* (C. B. Adams) = *Cyclostoma perpallidum* C. B. Ad. p. 139; *I. perplexus*† “**sp.**” **nov.** Appleton St. Elizabeth, Jamaica p. 140; *I. martinicensis* (Shuttleworth) p. 140; *I. cinereus* (Drouet) p. 141, P. BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942. [†Such name proposed not being a genus and having no

type cannot stand, and cannot under any pretext be considered as preoccupied for further use.—A.E.S.]

Incidostoma **subgen. nov.** p. 187, *Aperostoma*, *Aperostominae* Cyclophoridae, type *Aperostoma* (*Incidostoma*) *malleatum* **sp. nov.** p. 188 pl. xxv f. 4-6, ex Evezard coll. U.S. N.M. 317, 578, no loc., P. BARTSCH & J. E. P. MORRISON U.S. Nat. Mus. Bull. 181 Washington 1942.

Lagocyclus **gen. nov.** of Amphicyclotinae Cyclophoridae, type *Cyclophorus crosseanus* Hidalgo Ecuador, P. BARTSCH & J. E. P. MORRISON U.S. Nat. Mus. Bull. 181 Washington 1942 p. 154 pl. xx f. 9-11.

Liracyclotus **gen. nov.** of *Aperostominae* Cyclophoridae, type *Cyclostoma psilomitum* Pfeiffer 1851 P.Z.S. 19 p. 250, P. BARTSCH & J. E. P. MORRISON U.S. Nat. Mus. Bull. 181 Washington 1942 p. 274 pl. xix f. 7-9.

Megalomastoma (*Megalomastoma*) *petiti* Bordeaux Hill, Hurricane Harbor, St. John Is. **sp. nov.**, BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942 p. 50 pl. ix f. 16-18, 20.

Megalomastominae **subfam. nov.** of Cyclophoridae embracing Guatemalan and Mexican Chiapas *Tomocyclus*, the Hispaniolan *Farcimoides*, The Puerto Rican *Neopupina*, typical *Megalomastoma* from the Virgin Islands and *Megalomastomoides* from eastern Puerto Rico, TORRE & BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942 p. 3.

Megalomastomoides, **subgen. nov.** of *Megalomastoma*, type *Cyclostoma* (*Megalomastoma*) *verruculosum* Shuttleworth, Puerto Rico, P. BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942 p. 50 pl. ix f. 13-15, 19.

Mekongia hunanensis **sp. nov.** Hunan China, type in col. Brit. Mus., T.-C. YEN Proc. Malac. Soc. London 24 5-6 p. 194 pl. xiv f. 37.

Mexicyclotus **gen. nov.** of Amphicyclotinae Cyclophoridae, type *Cyclostoma lutescens* Pfeiffer 1851 Southwestern Mexico, P. BARTSCH & J. E. P. MORRISON U.S. Nat. Mus. Bull. 181 Washington 1942 p. 179 pl. xxiv f. 13-15.

Pila globosa embryology, A. R. RANJAH 323.

Poomacea [*Pomacea*] *paludosa* Say, var. *lutea*, I. P. FARFANTE 137.

Potieria (*Cyclobakeria*) *welchi welchi* **sp. et subsp. nov.** Dolphin Mt. Jamaica 1,200-1,400 ft. p. 118 pl. xvi f. 1-3; *P. (Cy.) welchi taylori* Great Valley, Hanover Parish, Jamaica p. 119 pl. xvii f. 37-39; *P. (Cy.) magister* Portland Parish, Jamaica p. 119 pl. xvii f. 40-42; *P. (Cy.) nana* Cousins Cove, Hanover Parish, Jamaica p. 120 pl. xvi f. 19-21; *P. (Cy.) chittyi* near Yallahs Bay, St. Thomas Parish p. 121 pl. xvii f. 4-6; *P. (Cy.) yallahsensis* Yallahs R., St. Thomas Parish, Jamaica p. 123, pl. xvii f. 16-18; *P. (Cy.) balnearis* near Bath, St. Thomas Parish, Jamaica p. 123 pl. xvii f. 7-9, P. BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942.—*P. senex* Portland Parish, Jamaica p. 92 pl. xiv f. 22-24; *P. adamsi* Portland Parish, Jamaica p. 94 pl. xiv f. 4-6; *P. simpsoni* Bog Walk, St. Catherine Parish, Jamaica p. 95 pl. xiv f. 16-18; *P. hendersoni* between Ford Augusta and Port Henderson, St. Catherine Parish, Jamaica p. 96 pl. xv f. 7-9; *P. marianna* Roaring River Falls, Ocho Rios, St. Ann Parish, Jamaica p. 97 pl. xv f. 1-3; *P. savannensis* Savanna la Mer, Westmoreland Parish, Jamaica p. 98 pl. xv f. 13-15; *P. orcutti* Arntully Estate, Stony Valley River, 3,000 ft. St. Thomas Parish, Jamaica p. 99, pl. xv f. 27-29; *P. monteogensis* Montego Bay, St. James Parish, Jamaica p. 101 pl. xv f. 33-35; *P. vendreysi* Worthy Park, 1 mile from Luidas Vale, St. Catherine Parish, Jamaica p. 102 pl. xv f. 36-38; *P. subglobosa* east side of Ferry R. above Kingston on Spanish Town road, St. Andrew Parish, Jamaica p. 103 pl. xv f. 16-18; **spp. nov.** *P. campeachyi petricola* **subsp. nov.** Stony Hill, St. Andrew Parish, Jamaica p. 104 pl. xv f. 22-24, P. BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942.—*P. (Potieria) burringtoni* Somerset, Manchester Parish Jamaica p. 107 pl. xvi f. 31-33; *P. (P.) imitator* Bogue Hill, St. Elizabeth Parish, Jamaica p. 108 pl. xvi f. 10-12; *P. (P.) plana* Montpelier, St. James Parish, Jamaica p. 113 pl. xvi f. 25-27; **spp. nov.**, P. BARTSCH U.S. Nat. Mus. Bull. 181 Washington 1942.—*P. caymanensis oligoptyx* **subsp. nov.** Battle Hill, eastern end of Grand Cayman about 2 miles inland, H. A. PILSBRY Nautilus Philad. 56 1 1942 p. 2 pl. i f. 12, 12a, 13, 13a.

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LITTORINACEA.

†*Holopea weaveri* **sp. nov.** Middle Ordovician Black River, near Trenary, Michigan, R. C. HUSSEY Pap. Mich. Acad. Sci. 26 1941 p. 446 pl. i f. 9-10.

Littorina littorea, *irrorata*, *saxatilis*, *nebulosa*, *ziczac*, *obtusata*, *mespilum*, *meleagris*, *angulifera*, figures, J. C. BEQUAERT 50.

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RISSOACEA.

Amnicola proserpina Hubricht at Saltpeter Cave, 3 m. N.-W. of Minnith, St. Genevieve Co., Missouri, L. HUBRIGHT 188.

Geomelania alemoni **sp. nov.** Boilers near Georgetown, Grand Cayman, H. A. PILSBRY Nautilus 56 1 1942 p. 3 pl. i f. 9.

Hydrobia ulvae, *jenkinsi* in Cheshire, N. F. McMILLAN 250.

†*Keilostoma nealingi* **sp. nov.** Opua R. 1/4 m. below Gorge Bridge, Kakahu

(Bortonian) Eocene, New Zealand, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 273 pl. xxiv f. 17, 18.

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Goniobasis annettae Cahaba River, Lily Shoals, Ribb Co., Alabama p. 1 text-fig. 1; *G. chiltonensis* Warsan Creek, near junction with Waxahatchee Creek, Chilton Co., Alabama p. 3 text-fig. 2. **spp. nov.**, C. GOODRICH Occ. Paps. Mus. Zool. Univ. Mich. 426 1941.—*G.* on the Alabama River system, C. GOODRICH 158.—*G.* on the Cahaba River, Alabama, C. GOODRICH 159.—*G.* of the Atlantic coastal plain, C. GOODRICH 161.—*G. mutabilis timidus* **subsp. nov.** Spring 2 m. N.-W. of Hawkinsville, Pulasko Co., Georgia,

C. GOODRICH *Oce. Pap. Mus. Zool. Univ. Mich.* 456 1942 p. 5.—*G.* behaviour of spermatozoa, T. M. WOODWARD 424.

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†*Turritella gatunensis taratara-noides* subsp. nov. Middle Miocene Costa Rica, O. HAAS J. Paleont Menasha, Wis. 16 3 1942 p. 315, text-figs. 3-4.

†*Turritella tolenasensis* pp. iii 62, pl. i f. 14, 15 Upper Cretaceous (Cenomanian or Turonian), Tolenas Grant, N. of Fairfield, California; *T. petersoni* ex Anderson MS. pp. iii 64 pl. i f. 10, 11 Upper Cretaceous (Cenomanian Turonian) 1 m. E. of Peterson's ranch house, 4 m. N. of Sites Colusa Co., California; *T. hearni* ex Anderson MS. pp. iii 64 pl. i f. 1-9 (Turonian) near Montague and Yreka Siskiyou Co., California; *T. packardii* pp. iv 66 pl. iii f. 5-8, 10-11, Chico formation, Upper Cretaceous, Santa Ana Mountains, California; *T. chaneyi* pp. iv 71 pl. vi f. 1-8, late Cretaceous higher sands of Moreno formation; *T. schencki* pp. iv 81 pl. x f. 9, 10, Upper Eocene Tejou formation, Tecuya Creek, Keru Co., California; *T. tejonensis* pp. iv 81 pl. xi f. 7, Tejon formation, Upper Eocene, Grapevine Canyon; *T. stocki* pp. iv 85 pl. xiii f. 13-16, West side of San Joaquin Valley-Paleocene; *T. coreyi* pp. v 105 pl. xl f. 11-13, Upper Eocene Tejou formation, Lompoc quadrangle; *T. moodyi* Applin MS. pp. v 121 pl. xxxiii f. 5-7 Middle Miocene, Temblor formation, Keru R. region, California; *T. pedroensis* Applin MS. pp. v 121 pl. xxxv f. 1-9, San Pedro Pleistocene (= *T. jewetti* "Cpr." Arnold 1903 non Cpr. 1864), spp. nov. Pacific Coast Region N. America, C. W. MERRIAM Univ. Calif. Pub. Geol. 26 1 1941.—†*T. chicensis perrini* subsp. nov. pp. iv 66 pl. ii f. 1-4,

6-8, Chico formation [Upper Cretaceous] Santa Anna Mountains near Santiago Canyon; *T. pachecoensis waringi* pp. iv 69 pl. vii f. 5, Paleocene Martinez stage, Sinie Valley; *T. pachecoensis renodata* pp. iv 69 pl. iv f. 7, 8, Paleocene Martinez stage, Sinie Valley; *T. pachecoensis adelaidana* pp. iv 70 pl. iv f. 9-14, subsp. nov. Adelaida quadrangle, northwestern Santa Luis Obispo Co. California; *T. andersoni susanae* pp. iv 79 pl. xi f. 6; Upper part of Santa Susana shale, Meganos stage, Las Lajas Canyon; Sinie Valley region; *T. andersoni mulleri* pp. iv 80 pl. xi f. 1-4, Middle Eocene (Domengine?) Ventura region; *T. wasana infera* pp. iv 90 pl. xl f. 2-4, Santa Susana formation, San Lajos Canyon, Sinie Valley; *T. wasana aedificata* pp. iv 90 pl. xvii f. 11-15, Domengine stage, Mount Diablo region; *T. wasana etheringtoni* pp. iv 94 pl. xv f. 12-15; Domengine stage, Las Lajas formation, Ventura Co. California; *T. wasana chehalisensis* pp. iv 94 pl. xvi f. 11-14, Upper Eocene, Cowlitz formation near Balch, Chehalis Valley, Grays Harbor Co. Washington; *T. wasana stewarti* pp. iv 95 pl. xvi f. 7-9, Upper Eocene Cowlitz formation, Washington; *T. inezana pervulgata* pp. v 108 pl. xxv f. 7, 11, Lower Miocene, Vaqueros formation, Bryson quadrangle; *T. inezana equestriata* pp. v 109 pl. xxv f. 9, 10, Lower Miocene, Vaqueros formation, Ojai Valley?; *T. vanvlecki teglandae* pp. v 126 pl. xxxvii f. 4, 6-10 (Holotype Shell Oil Co.) Middle and Lower Pliocene Fuller Point, Gary Calif.; *T. vanvlecki hemphilli* Applin MS. pp. v 126 pl. xxxvii f. 13, Middle Pliocene (?) Pacific Beach, San Diego, California; subsp. nov. Pacific Coast region N. America, C. W. MERRIAM Univ. Calif. Pub. Geol. 26 1 1941.—†*T. andersoni lawsoni secundaria* pp. iv 78 pl. ix f. 9, Middle Eocene, Domingine stage, Sine Valley Aliso Canyon; *T. wasana neopleura* pp. iv 93 pl. xv f. 4-7; Tejon Eocene at Live Oak Canyon; *T. variata juliana* pp. iv 99 pl. xix f. 10, San Julian ranch, N. slope of Santa Yuez Mountains; *T. ocoyana topangaensis* pp. v 115 pl. xxx f. 1-3, 5, Middle Miocene, Temblor formation, Coelababas quadrangle; *T. cooperi paucisculpta* pp. v 119 p. xxxix f. 8-10, Upper Pliocene, Jacalitos stage, west side of Waltham Canyon, Coalinga district; vars. nov. Pacific coast region, N. America, C. W. MERRIAM

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AMALTHEACEA.

†*Fossarus dixoni* (Edwards MS.) Bracklesham beds, Bracklesham Bay Edwards collection, A. WRIGLEY Proc. Malac. Soc. London **25** 3 1942 p. 104, pl. iii f. 10, 11.

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Anaplocamus borealis Dall = *Anculosa dilatata* Conrad, H. A. REHDER **326**.

†*Cerithioderma latum* p. 101 pl. iii f. 1, London Clay, Highgate Wood, Finchley, Edwards collection; *C. costulatum* p. 101 pl. iii f. 2, Middle Barton beds, Barton, Edwards collection; *C. tenuisculptum* p. 102 pl. iii f. 4, Middle Barton beds, Alum Bay (I.O.W.), Curry collection; *C. reticulatum* p. 102, pl. iii f. 5, 7, Upper Bracklesham beds, Brook, Edwards collection; *C. bartonense* p. 103 pl. iii f. 9 Middle Barton beds, Barton, Curry collection; Eocene spp. nov. *Cerithioderma costulatum* form *elongatum* p. 102 pl. iii f. 3 Middle Barton beds, Barton; *C. reticulatum* form *aciculatum* p. 103 pl. iii f. 6, 8 Edwards MS. Newton-forma nov., A. WRIGLEY Proc. Malac. Soc. London **25** 3 1942.

Crepidula onyx, *forficata*, ex change and genitive organs transformation figs., W. R. COE **98**; *C. onyx nummaria*, figs. showing variation in growth and shape, W. R. COE **99**.

STROMBACEA.

†*Chedvillia stewarti* sp. nov. Eocene California, B. L. CLARK J. Paleont. Menasha, Wis. pp. 116, 117 pl. xix f. 7-11.

†*Eotibia* subgen. nov. of *Tibia* Röding subgenotype *Rostellaria*? *lucida* J. Sow 1815 = *Tibia lucida* (J. Sow), B. L. CLARK J. Paleont. Menasha, Wis. **16** 1 1942 p. 117 pl. xix f. 1, 2.

Strombus raninus nanus subsp. nov. Southern end of Lake Worth, Palm Beach County, Florida, B. R. BALES Nautilus **56** 1 1942 p. 19 pl. iv fig. a b; *S. costatus* fig. 829 pl. lxxxii Martini Conch-Cab. (1) 3 1777, selected as type fig., CLENCH & ABBOTT **91**.—*S. raninus*,

pugilis, *alatus*, *gigas*, *pugilis nicaraguensis*, *costatus samba*, *goliath* of the Western Atlantic figs., CLENCH & ABBOTT **91**.

†*Tibia* (*Eotibia*) *llajasensis* sp. nov. Eocene California, B. L. CLARK J. Paleont. Menasha, Wis. **16** 1 1942 pp. 116, 118 pl. xix f. 3-6.

Xenophora pallidula Rve. figs. and shells attached, D. W. DEVANESSEN **116**.

ATLANTIDACEA.

Oxygyrus keraudreni sectional figs., C. M. YONGE **439**.

NATICACEA.

Tella sec. nom. nov. for *Natela* Palmer 1937 non Watson (Mollusca) 1934, K. V. W. PALMER J. Paleont. Menasha, Wis. **16** 5 1924 p. 674.

LAMELLARIACEA.

Lamellaria leucosphaera sp. nov. drafted in 1½ to 2 fms. off Red Fish Pass, in Pine Island Sound Captiva, Florida, J. S. SCHWENGEL Nautilus **56** 2 1942 p. 62; Naut. **56** 1 1942 pl. iii f. 8.

Onchidiopsis kingmaruensis sp. nov. Baffin Band, H. D. RUSSELL Canad. J. Res. Ottawa **20D** 2 1942 p. 50 figs. 1-9.

Trivia maltbiana sp. nov. 14 fms. off Destin, Northwest Florida, J. S. SCHWENGEL & T. L. MCGINTY Nautilus **56** 1 1942 p. 16 pl. iv fig. d.

Velata Quenstedt, notes on the genus, figs., L. R. COX **110**.

CYPRAEACEA.

Cypraea (*Lyncina*) *carneola levianthan* subsp. nov. SCHILDER & SCHILDER die Cypraeidae des Bismarckarchipels Zool. Anz. **119** 190 (1937) vide title 972 Zool. Rec. 1937 [omission].

Cypraeidae "Porcelaines," L. BERNER, **52**.

TONNACEA.

†*Calagiagaleodea* subgen. nov. of *Galeodea* subgenotype *C. californica* sp. nov. Eocene California, B. L. CLARK J. Paleont. Menasha, Wis. **6** 1 1942 pp. 116, 118 pl. xix f. 15-19.

†*Echinophoria dalli* (Dickerson) *tritulerkulata* (Weaver), figs., J. W. DURHAM 125.

Ficus papyratus Say, figs. in the Western Atlantic, W. J. CLENCH 79.

Galeodea echinophora (L), fig., J. W. DURHAM 125.—†*G. (Gomphopagus) suterensis* (Dickerson) fig., J. W. DURHAM 125.—†*G. geniculosa* sp. nov. Hampden Bortonian Stage (Eocene) New Zealand, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 274 pl. xxiv f. 25.

†*Priscoficus alectodens* sp. nov. Hampden Beach Eocene New Zealand, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 275 pl. xxv f. 33, 34.

P TENIOGLOSSA.

EPITONIACEA.

Sthenorytis cubana dredged by the "Blake" in 805 fms. off Morro Light, Cuba p. 264 pl. xlvii f. 1; *S. hendersoni* in 120 fms. off Sambo Reef, Florida p. 264 pl. xlvii f. 2; *S. epae* 36 m. S. half W. from Hatteras in 107 fms. p. 265 pl. xlvii f. 4 spp. nov., P. BARTSCH Mem. Soc. cubana Hist. nat. 14 4 1940. —*S. pernobilis*, Fisch. and Bern. fig., P. BARTSCH 35.

PYRAMIDELLACEA.

Actis hypergonia sp. nov. off Lantana, Florida, in 550 feet, J. S. SCHWENGEL & T. L. MCGINTY Nautilus 56 1 1942 p. 17 pl. iii f. 5.

Actaeopyramis subgen. nov. of *Pyramidella*, *A. striata* Gray = *Monotygmia* Gray = *Monotygmia* non Lea, P. FISCHER Man. de Concl. 1887 p. 787 [omission.]

†*Cirsotrema kuriensis* sp. nov. Hampden Beach Eocene, New Zealand, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 275 pl. xxiv f. 21.

Hemiliostraca sec. nov. of *Subularia* type *S. distorta* (Pease) = *Liostraca distorta* Pease, PILSBRY Proc. Acad. Nat. Sci. Philad. 69 1917 p. 228 [omission.]

Hyperlia subgen. nov. of *Scalenotoma* type *Sc. apiculatum* Souverbie, PILSBRY Proc. Acad. Nat. Sci. Philad. 69 1917 p. 226-227 [omission.]

†*Loxonema chadwicki* sp. nov. quarry west of Cottekill railway station, Ulster

Co., New York, B. F. HOWELL Bull. New York St. Mus. Albany 327 1942 p. 90 fig. 15 (9).

†*Niso basiglobosa* sp. nov. Opua R. $\frac{1}{4}$ m. below Gorge Br., Kakahu (Bortonian) Eocene, New Zealand J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 276 pl. xxiv f. 19, 20.

STENOGLOSSA.

(a) RHACHIGLOSSA.

MURICACE

Coralliobia smithi sp. nov. Macclesfield Bank, China Sea 30-50 fm., type in Col. British Museum, T.-C. YEN Proc. Malac. Soc. London 24 5-6 1942 p. 226 pl. xxi f. 143.

†*Forreria magister munda* var. nov. Kettleman Hills Oilfield, California, WOODRING, STEWART & RICHARDS Prof. Pap. U.S. Geol. Surv. 195 1940 p. 15 f. 17, 18.

Murex brandaris, A. JULLIEN & A. BONNET 205.—†*M. millvillensis* sp. nov. Miocene, Millville, New Jersey, RICHARDS & HARBISON Proc. Acad. Nat. Sci. Philad. 94 1942 p. 212 pl. xix f. 16.

Muricidea ostrearum, B. R. BALES 32.

Tritonalia interfossa, beta off White Point, California, B. BORMANN & FAM. 57.

Trophon (Boreotrophon) diazi p. 122 pl. viii f. 3, 4; *T. lorenzoensis* p. 123 pl. viii f. 1, 2; spp. nov. Sal Si Pudes Channel between San Lorenzo Ids. and Peninsula of Lower California, in 860 fms., J. W. DURHAM Nautilus, Philad. 55 4 1942.

Urosalpinx cinerea growth in British waters figs. and graphs, H. A. COLE 101.

BUCCINACEA.

Buccinum undatum as food, recipes, A. L. SIMON 368.

†*Fascioplex browni* sp. nov. Greensands Waihao Downs, Eocene, New Zealand, J. MARWICK Trans. Proc. Roy. N.Z. 72 3 1942 p. 277 pl. xxv f. 30.

Latirus (Hemipolygona) mcmurrayi sp. nov. dredged of Matanzas, Matanzas Prov., Cuba in 190 fms., W. J. CLENCH & C. G. AGUAYO Mem. Soc. cubana Hist. nat. 15 2 1941 p. 178 pl. xiv f. 3.

†*Melongena margaritana* Richards Pleistocene Margarita Is., Venezuela **sp. nov.** to be described later, RICHARDS Bol. Soc. venezolana Cienc. nat. **6** 46 1940 p. 306.

Metula fusiformis dredged off Cienfuegos, Santa Clara Prov., Cuba in 1,440 fms., f. 1; *M. agassizi* dredged off Sagua la Grande, Santa Clara Prov., Cuba f. 4; **spp. nov.**, W. J. CLENCH & C. G. AGUAYO Mem. Soc. cubana Hist. nat. **15** 2 1941 p. 179 pl. xiv.

Nassa reticulata var. *pontica*, N. (Cyclonassa) neritea biology and production. M. J. BERMAN **45**.

“†*Nassa*” *miser iniqua* var. **nov.** Etehegoin formation Kettleman Hills Oilfield, California, WOODRING, STEWART & RICHARDS Prof. Pap. U.S. Geol. Surv. **195** 1940 p. 87 pl. xxxiv f. 8.

Neptunea genotype, H. A. REHDER **327**.

Phos? *adelus* **sp. nov.** Puerto Plata, Dominican Republic, J. S. SCHWENGEL Nautilus **56** 2 1942 p. 66; Naut. **56** 1 1942 pl. iii f. 4.

Tritiaria (*Antillophos*) *virginiae* **sp. nov.** dredged at 65 fms. off Palm Beach, Florida, J. S. SCHWENGEL Nautilus **56** 2 1942 p. 65; Naut. **56** 1 1942 pl. iii f. 6. 7.

†*Zexilia hamptenensis* **sp. n.** Hampden Beach (Bortonian Stage) Eocene, New Zealand, J. MARWICK Trans. Proc. Roy. Soc. N.Z. **72** 3 1942 p. 276 pl. xxiv f. 22.

VOLUTACEA.

†*Bathyaureinia aguayoi* **sp. nov.** N. lat. 30° 03', W. long 78° 37' about 164 m. east of St. Augustine, Florida in 425 to 430 fms., W. L. CLENCH Mem. Soc. cubana Hist. nat. **14** 3 1940 p. 241 text-fig. radula tooth.

†*Cancellaria kimikore* **sp. nov.** Miocene formation of Kozai-mara Miyagiken, K. HATAI Bull. Biog. Soc. Japan **10** 8 1940 p. 115.—†*C. tyosenensis* **sp. nov.** Miocene, Japan, K. M. HATAI & S. NISIVAMA Saito-Ho-on kai Mus. Res. Bull. **19** 1940 p. 117.

Hyalina rathouisii Heude anatomy, figs. type of new genus *Tengchiena* [q.v.], H. B. BAKER **29**.

Mitra florida Gould, *cornea* Lk. radulae figs., T. BAYER **43**.—*M. florida* living at Eastern Dry Rocks, J. SCHWENGEL **357**.

Olivella biplicata colour variation in different localities, D. S. & E. W. GIFFORD **150**.

Prodallia **gen. nov.** Volutidae [non *Prodallia* Mark Arach.] type, *P. dalli* **sp. nov.** off Cape Santiago, Luzon, in 394 fms. on green mud and sand bottom, p. 10; pl. ii f. 1, 4; *P. smithi* off Balicasag Island, Bohol, in 439 fms. in globigerina ooze bottom p. 11 pl. ii, f. 5; *P. johnsoni* off Cagayan Island Jolo Sea, 340 fms. coral sand bottom p. 12 pl. ii f. 3; *P. barthelowi* off Cagayan Island Jolo Sea, 495 fms. grey mud and coral sand bottom p. 12 pl. ii f. 2: **spp. nov.**, P. BARTSCH Nautilus **56** 1 1942. [*Prodallia dalli* nom et fig. appeared on a distributed Banquet Brochure for William Healey Dall p. 10 in 1915—but this not being a purchasable publication the name must date from the Nautilus as above.]

†*Trigonostoma planasuturata* **sp. nov.** Miocene Millville, New Jersey, RICHARDS & HARBISON Proc. Acad. Nat. Sci. Philad. **94** 1942 p. 217 pl. xxi f. 4, 5.

Voluta scapha Gmel. fig. of radula tooth, T. BAYER **43**.

Volutidae, an illustrated review, MAXWELL SMITH **371**.

STENOGLOSSA.

(b) TOXOGLOSSA.

CONACEA.

†*Anacithara clifdenica* Clifden (Hutchinsonian) Lower Miocene p. 155 pl. v f. 8; *A. errabunda* Clifden (Hutchinsonian) pp. 155, 156 pl. v f. 10; *A. nana* Clifden (Awamoan) pp. 155, 156 pl. v f. 11; *A. finlayi* Clifden (Awamoan) pp. 155, 156 pl. v fig. 7; **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. **2** 1942 pp. 23, 30, 61 pl. x f. 11.

Anticomitas **gen. nov.** Turriculinae, Turridae type *A. vivens* **sp. nov.** Recent 140 fms. off Three Kings Islands, A. W. B. POWELL Bull. Auckland Inst. Mus. **2** 1942 pp. 23, 30, 61 pl. x f. 11.

Antiguraleus **gen. nov.** Mangeliinae, Turridae, type *A. otagoensis* **sp. nov.** 50 fms. off Oamaru, New Zealand pp.

23, 147 pl. viii f. 4; *A. subtruncatus* 50 fms. off Oamaru pp. 146 147 pl. viii f. 1; *A. fenestratus* 60 fms. off Knights Ids. pp. 146, 148 pl. viii f. 6; *A. roisianus* pp. 146, 148 pl. viii f. 3; *A. pedicus* pp. 146, 148 pl. viii f. 5, 50 fms. off Snares Ids.: **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.—†*A. deceptus* Petane Hawke's Bay (Niekumaruan) Middle Pliocene p. 146 pl. viii f. 7; New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

Antimelatoma **gen. nov.** Clavinae, Turridae, type *Drillia maorum* Smith, Recent N.Z., pp. 23, 97; *A. benthicola* **sp. nov.** 50–70 fms. off Otago Heads, New Zealand p. 98 pl. ii f. 10; *A. ahiparana* **sp. nov.** 23 fms. off Ahipara, N.Z., p. 98 pl. ii f. 11, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

Aoteadrillia otagoensis **sp. nov.** in 72 fms. off Cape Saunders, Otago, New Zealand (Laws collection), A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 88, 89 pl. ii f. 8.

†*Aoteadrillia* **gen. nov.** Clavinae, Turridae type *Pleurotoma wanganuiensis* Hutton (Castlecliffian) Upper Pliocene, N.Z., A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 23, 87.—†*A. trifida* pp. 88, 91 pl. xii f. 13, Arenaceous mudstone, Makara-Mangaopari road junction, Waipawa (Lower Nukumaruan), Middle Pliocene; *A. waihuensis* pp. 88, 91 pl. xii f. 14, Waihua River (Waitotaran), Lower Pliocene; *A. bisecta* pp. 88, 92 pl. i f. 6, Petane, Hawke's Bay (Upper Nukumaruan), Middle Pliocene; *A. finlayi* pp. 82 93 pl. i f. 5 Cliff opposite Eskdale Bridge, Petane (Nukumaruan), Middle Pliocene, **spp. nov.**, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

Aoteatilia Powell 1939, t.o.d. *Daphnella substriata* Suter. The author of the genus removed this species from Turridae when proposing the genus and placed it in Pyrenidae which location he now confrms, A. W. B. POWELL p. 170 Bull. Auckland Inst. Mus. 2 1942.

†*Austroclavus* **gen. nov.** Clavinae, Turridae, type *Drillia tenuispiralis* Marshall (Hutchinsonian) Lower Miocene N.Z., pp. 23, 118; *A. finlayi* p. 119 pl. i f. 3 Clifden (Hutchinsonian), Lower Miocene; *A. clifdenensis* p. 119 pl. i f. 1; Clifden (Hutchinsonian), Lower Miocene; *A. awakinoensis* Awakino

Gorge, Hutchinsonian, Lower Miocene p. 120 pl. i f. 4; *A. marshalli* Pukeuri pp. 119, 120 pl. i f. 2, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

Austrodrillia vide *Regidrillia* subgen. **nov.**, A. W. B. POWELL.

†*Austrotoma kauparaensis* pp. 72, 73 pl. iii f. 9, Pakaurangi Point, Kaipara (Hutchinsonian), Lower Miocene; *A. clifdenica* pp. 72, 73 pl. iii f. 4, Clifden (Hutchinsonian), Lower Miocene; *A. echinata* pp. 73, 74 pl. iii f. 5, Clifden (Hutchinsonian); *A. cryptoconoidea* Clifden (Hutchinsonian) pp. 72, 75 pl. iii f. 6; *A. lawsi* pp. 72, 75 pl. iii f. 8, Blue Cliffs, South Canterbury, Middle Miocene; *A. nervosa* pp. 73, 76 pl. xiv f. 6, Mt. Harris, Canterbury (Awamoan), Middle Miocene; *A. gemmulata* pp. 73, 76 pl. iii f. 7 Clifden, Middle Miocene; *A. ampla* pp. 73, 77 pl. xiv f. 5 Marlborough (Waitotaran), Lower Pliocene: **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Awaterea defossa* Wairoa (Taranakian) Upper Miocene pp. 128, 129 pl. xi f. 7; *A. marwicki* Wairoa (Taranakian) pp. 128, 129 pl. xi f. 5; *A. echinata* Wairoa top of Opoetian? Lower Pliocene pp. 129, 130 pl. xi f. 2; *A. personata* Taramarama, Lower Pliocene pp. 129, 130 pl. xi f. 3; *A. Thomsoni* Lower end of Starborough Creek, Marlborough (Waitotaran) Lower Pliocene pp. 129, 130 pl. xi f. 1; *A. wairoensis* mudstone with pumice fragments, coast 1–2 m. W. of mouth of Wairoa River, Hawke's Bay (Waitotaran) Lower Pliocene pp. 129, 131 pl. iv f. 6 New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Belatamina* **gen. nov.** Conorbinae, Turridae, type *Bela pulchra* Tate (Balcumbian) Middle Miocene, Victoria, A. W. B. Powell Bull. Auckland Inst. Mus. 2 1942 pp. 23–72.

†*Carinacomitas* subgen. **nov.** of *Comitas*, type *Pleurotoma clarae* Tenison-Woods (Balcumbian) Middle Miocene, Victoria, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 23, 30.

†*Clavatoma* **gen. nov.** Clavinae, Turridae type *C. pulchra* **sp. nov.** (Opoitian-Waitotaran) Lower Pliocene, N.Z., pp. 23, 106, 107 p. xii f. 8.

†*Comitas allani* Devil's Elbow Napier-wairoa Rd. (Nukumaruan) Middle Plio-

cene, New Zealand pp. 58, 59 pl. x f. 6; *C. (Carinacomitas)* **subgen. nov.** [q.v.] *subcarinapex* Clifden, Southland (Hutchinsonian) Lower Miocene pp. 60, pl. x f. 5 **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

Conus regius abbotti **subsp. nov.** Arthurstown, Cat Island, Bahamas p. 6 pl. iv f. 2-3; *C. verrucosus piraticus* Boynton Beach, Florida p. 14, pl. xi f. 1; *C. spurius atlanticus* p. 20 pl. x f. 1-3 Bonita Springs, Florida; *C. floridanus burryae* off Lower Matecumbe Key, Lower Florida Keys. 29 pl. xiv f. 3-4; *C. bermudensis lymani*, dredged off Nellies Point, South Lake Worth, Palm Beach Co., Florida p. 35, pl. xiii f. 3, **subsp. nov.**, W. J. CLENCH Johnsonia Mass. 6 1942.—*C. caribbaeus* off Palm Beach, Co. Florida p. 23 pl. xi f. 4-5; *C. brasiliensis* Victoria Brasil Thayer Expedition p. 24 pl. xii f. 2; *C. juliae* off Fort Walton, Okaloosa Co., Florida p. 26 pl. xii f. 4; *C. perryae* = *C. melvilli* Perry 1939 non Sow 1878 p. 31 pl. xv f. 5; *C. bermudensis* Dyer Island Bermuda p. 34 pl. xiii f. 4: **spp. nov.**, W. J. CLENCH Johnsonia Mass. 6 1942.—*C. quercinus, pulicarius, regius, regius cardinalis, dominicanus, citrinus, stearnsii, jaspideus, jaspideus pygmaeus, largillierii, verrucosus, stimpsoni, mazei, granulatus, spurius, clerii, daucus, flavescens, centurio, villepinii, floridanus, sozoni, ranunculus*; figures, W. J. CLENCH 83.—*C. fosteri* **sp. nov.**, CLENCH & AGUAYO Atlantis station 3434 N. lat. 23° 10'; W. long 79° 35' off Sagua la Grande, Santa Clara Prov., Cuba, May 1, 1939 in 260 fms., in W. J. CLENCH "Conus," Johnsonia Mass 6 1942 p. 34 pl. xii f. 3.—*C. geographus, aulicus, marmoreus, tulipa, textile, striatus* figs., W. J. CLENCH & Y. KONDO 94.—*C. striatus* anatomy figs., W. J. CLENCH, Y. KONDO 94.

†*Cosmasyrinx semilirata* **sp. nov.** Upper Oligocene, Waihoka Corner, Longwood S.D. Orepuki (Duntroonian), New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 p. 70 pl. xiv f. 9.

†*Cryptodaphne* **gen. nov.** Daphnelinae, Turridae, type *C. pseudodrillia* **sp. nov.** (Hutchinsonian) Lower Miocene, Pakaurangi Point, Kaipara, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 24, 164, 165 pl. iv f. 3.

Douglassia baeliana **sp. nov.** 14 fms. off Destin, Northwest Florida, J. S. SWENGEL & T. L. MCGINTY Nautilus 56 1 1942 p. 15 pl. iii f. 2.

†*Echinoturris* **gen. nov.** Turridae, Turridae, type "*Turris*" *finlayi* Powell (Awamoan) Middle Miocene, N.Z., A. W. B. POWELL Bull. Auckland Inst. & Mus. 2 1942 pp. 23, 30, 50.

†*Eoscobinella* **gen. nov.** Clavinae, Turridae, type *E. tahuia* **sp. nov.** (Tahuian) Upper Eocene, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 23, 122 pl. iv f. 1.

†*Etrema kaipara* **sp. nov.** Pakaurangi Point, Kaipara (Hutchinsonian) Lower Miocene, A. W. P. POWELL Bull. Auckland Inst. Mus. 2 1942 p. 150 pl. x f. 3.

†*Etrempsopsis* **gen. nov.** Mangeliinae, Turridae, type *Drillia imperfecta* Suter (Awamoan) Middle Miocene, N.Z. pp. 23, 151; *E. clifdenica* Clifden (Hutchinsonian) Lower Miocene p. 152 pl. ix f. 9; *E. compta* Clifden, Lower Miocene p. 152 pl. ix f. 10; *E. erecta* Clifden, Lower Miocene p. 152 pl. ix f. 7; *E. carinapex* Pukeari, Oamaru (Awamoan), Middle Miocene pp. 151, 153 pl. ix f. 6.—†*E. aequisculpta* pp. 151, 153 pl. ix f. 3, Target Gully (Awamoan), Middle Miocene; *R. elata* pp. 152, 153 pl. ix f. 8 Pukeuri, Oamaru (Awamoan), Middle Miocene; *E. oamarutica* Ardgowan near Oamaru (Awamoan) pp. 152, 154 pl. ix f. 2; *E. haroldi* Ardgowan (Awamoan) pp. 152, 154 pl. ix f. 4; *E. quadrispiralis* Dyer's Run, Lower Waihao Valley (Awamoan) pp. 152, 154 pl. ix f. 1; *E. latiapex* Pukeuri, near Oamaru (Awamoan), Middle Miocene, **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Eubela awakinoensis* **sp. nov.** Awakino Gorge 1 m. W. of road tunnel (Mahoenui Beds, Hutchinsonian), Lower Miocene, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 p. 165 pl. x f. 2.

†*Fusiguraleus* **subgen. nov.** of *Neoguraleus* type *Clathurella leptosoma* Hutton (Awamoan), Middle Miocene, N.Z., A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 23, 139.

†*Gemmula longwoodensis* **sp. nov.** pp. 48, 49 pl. xiii f. 13 Duntroonian, Upper Oligocene, Waihoka Corner, Longwood,

S.D. Orepuki, Southland; *G. clifdenensis* pp. 48, 49, pl. xiii f. 14, Clifden, Southland, Hutchinsonian, Lower Miocene: **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. & Mus. 2 1942.

Hastula Eocene species figs., A. WRIGLEY 433.

Hauturua subgen. nov. of *Syntomodrillia*, type *S. (H.) vivens* **sp. nov.** 20 fms. off Little Barrier Island, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 23, 105, 106 pl. ii f. 5.

Howellia mirabilis **sp. nov.** dredged off Matanzas, Matanzas Prov., Cuba in 285 fms., W. J. CLENCH & C. G. AGUAYO Mem. Soc. cubana Hist. nat. 15 2 1941 p. 177 pl. xiv f. 2.

†*Inquisitor waihaoensis* **sp. nov.** McCullough's Bridge, Waihao, South Canterbury (Taehaian) Upper Eocene, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Insolentia elegantula* **sp. nov.** Middle Miocene, Dyer's Run, Lower Waihao Valley, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 p. 64 pl. x f. 7.

†*Integradrillia* **gen. nov.** Clavinae, Turridae, type *Drillia integra* Tenison-Woods (Balcombian), Middle Miocene, Victoria, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 23, 94, 95.

†*Lirasyrinx* **gen. nov.** Cochlespirinae, Turridae type *L. anomala* **sp. nov.** (Duntroonian) Upper Oligocene, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 23, 30, 69.

†*Liratolina* **gen. nov.** Conorbinae, Turridae type *Bela sculptilis* Tate 1888 (Balcombian), Middle Miocene, Victoria, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 23, 72.

Liracraea otakauica 60 fms. off Otago Heads p. 149 pl. v f. 5; *L. subantarctica* Bounty Ids., in 50 fms. p. 149 pl. v f. 6; *L. odhneri* Tryphena Bay, 6 fms. Great Barrier Id., pp. 149 150 pl. v f. 4, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Maoridaphne* **gen. nov.** Daphnelinae, Turridae type *Daphnella clifdenensis* (Hutchinsonian), Lower Miocene, N.Z., pp. 24, 162; *M. haroldi* **sp. nov.**

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Maorimorpha secunda **sp. nov.** 72 fms. off Cape Saunders, Otago, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 p. 126 pl. v f. 1.

Maoritomella **gen. nov.** Clavinae, Turridae type *Pleurotoma albula* Hutton, Recent N.Z., pp. 24, 111, 113, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 24, 113.—†*M. aunosa* Waitaki River, South Canterbury (Duntroonian), Upper Oligocene pp. 113, 114 pl. iv f. 10; *M. sola* Blue Cliffs, South Canterbury (Awamoan), Middle Miocene pp. 113, 114 pl. iv f. 11; *M. pukeuriensis* Pukeuri, near Oamaru (Awamoan), Middle Miocene pp. 113–114 pl. iv f. 9; *M. pagodula* muddy sandstone, Tahoraite, Dannevirke pp. 114, 115 pl. xiii f. 9; *M. robusta* Maharahara Stream Woodville (Nukumaruan) Middle Pliocene pp. 114, 115 pl. xiii f. 8, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Marshallena anomala* pp. 82, 83 pl. xiv f. 1 Target Gully, Oamaru (Awamoan), Middle Miocene; *M. impar* pp. 82, 83 pl. xiv f. 2 Takapaw, Dannevirke (Upper Waitotaran), Lower Pliocene: **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Marshallaria waitakiensis* pp. 80, 81 pl. iii f. 11 Otiake, Waitaki River, North Otago (Waitakian), Upper Oligocene; *M. senta* pp. 80, 81 pl. xiv f. 3 Rifle Butts, Oamaru (Awamoan), Middle Miocene, **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Mauidrillia* **gen. nov.** Clavinae, Turridae type *Mangilia praecophinodes* Suter (Awamoan) Middle Miocene, N.Z., A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 24, 85.—†*M. inaequalis* pp. 85, 86 pl. i f. 11, Otiake Waitaki Valley (Waitakian), Upper Oligocene; *M. supralaevis* pp. 85, 86 pl. i f. 7 Target Gully (Awamoan), Middle Miocene; *M. clavicula* pp. 85, 86 pl. i f. 12, Target Gully (Awamoan), Middle Miocene; *M. unilirata* pp. 82, 87 pl. i f. 10 Ardgowan, near Oamaru (Awamoan) Middle Miocene; *M. angustata* pp. 82, 87, pl. i. f. 9, Pukewie, near Oamaru (Awamoan),

Middle Miocene **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Micantapex discors* Clyde, Wairoa River, Hawke's Bay (Waitotaran), Lower Pliocene pp. 53-54 pl. xiii f. 5; *M. proaxitus* Dannevirke (Waitotaran) Lower Pliocene pp. 53, 54 pl. xiii f. 14; *M. pancispinalis* Ruakakapatuna Junction, Middle Pliocene pp. 53, 55 pl. xiii f. 2; **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Microdrillia pakaurangia* Pakaurangi Point, Kaipara (Hutchinsonian), Lower Miocene, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 p. 117 pl. ii f. 9.

†*Mirula* **subgen. nom. nov.** for *Terebella* Palmer 1937, non Packard 1867 err. pro *Terebella* Lk., non Maltzan 1886 Mollusca, non Andreae 1887 (Mollusca), K. V. W. PALMER J. Paleont. Mesasha, Wis. 16 5 1942 p. 674.

†*Mitrellatoma* **gen. nov.** Clavinae, Turridae, type *Columbella angustata* Hutton (Nukumaruian), Middle Pliocene N.Z., A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 24, 109, 110 pl. xii f. 7.

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†*Notogenota* **gen. nov.** Conorbiinae, Turridae type *Hemifusus (Mayeria) geniodes* Suter (Bortonian), Middle Eocene, N.Z., A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 24, 78.—*N. finlayi* South Canterbury (Tahnian), Upper Eocene p. 79 pl. iii f. 10; *N. pahiensis* Pahi greensands, Kaipara (Bortonian), Middle Eocene p. 79 text-fig. D.19 p. 40, **spp. nov.** New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Paracomitas* **gen. nov.** Turriculinae, Turridae, type *Surcula castlecliffensis* Marshall & Murdoch (Castlecliffian), Upper Pliocene N.Z., New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 24, 30, 61.

†*Phenatoma lawsi* p. 108 pl. x f. 9, Target Gully, Oamaru (Awamoan),

Middle Miocene; *P. precursor* p. 109 pl. x f. 8 Inner Harbour, sands above blue clays, Middle Pliocene, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Pseudoinquisitor* gen. nov. Clavinae, Turridae type *P. problematicus* sp. nov. (Awamoan), Middle Miocene, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 24 96 pl. iii f. 3.

†*Puha sinusigera* sp. nov. Pukeuri, near Oamaru (Awamoan), Middle Pliocene, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 p. 164 pl. iv f. 8.

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†*Rugobela nodulosa* sp. nov. sandstone overlying greensand at Campbell's Beach, All Day Bay, Otepopo (Awamoan), Middle Miocene, N.Z., A. W. B. POWELL Rec. Auckland Inst. Mus. 2 1942 p. 161 pl. xi f. 11.

†*Scrinium finlayi* pp. 126, 127 pl. xi f. 9, Target Gully, Oamaru (Awamoan), Middle Miocene; *S. thomsoni* pp. 126, 127 pl. xi f. 8, lower end of Starborough Creek, Marlborough (Waitotaran) Lower Pliocene spp. nov. New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†Speightiidae fam. nov. for *Speightia* Finlay 1926 "foreign to Turridae being more suggestive of *Verconella* (Buccinulidae), and the Fusinidae-Fasciolaridae," A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 3, 166.

Splendrililla otagoensis sp. nov. 50 fms. off Oamaru, Otago, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 100, 104 pl. ii f. 4.—†*S. clifdenensis* Clifden, Southland (Awamoan), Middle Miocene p. 101 pl. ii f. 2; *S. lincta* Wakanui Road, 1,200 paces E. of Mohaka Rd., Waian (Opitian), Lower Pliocene p. 101 pl. xii f. 1; *S. clava* Motaotaraia Waitotaran, Lower Pliocene p. 101 pl. xii f. 6; *S. cristata* Hawkeswood Amuri-Kaikoura (Nukumaruan), Middle Pliocene p. 102, pl. xii f. 4; *S. armata* Hawkeswood, Middle Pliocene p. 103 pl. xii f. 2; *S. edita* nom. nov. = *Drillia alabaster* Hutton Trans. N.Z. Inst. 18 p. 351 non

Reeve 1843; p. 103 pl. ii f. 3, holotype in Auckland Mus.; †*S. annectens* Blue Clays, Wanganui (Castlecliffian), Upper Pliocene pp. 100, 103 p. xii f. 5; *S. anomala* Wanganui pp. 100, 103 pl. xii f. 3; spp. nov. New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Surculites Yokoyamai elongatus* subsp. nov. Miocene Tsunetoyo-mara Hukushima-ken, K. HATAI Bull. Biogr. Soc. Japan 10 8 1940 p. 115.

†*Syntomodrililla wamuensis* sp. nov. Clifden Southland, New Zealand (Hutchinsonian), Lower Miocene, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 p. 105.

†*Tahudrililla* gen. nov. Clavinae, Turridae type *T. simplex* sp. nov. (Tahuian), Upper Eocene N.Z., pp. 24, 99; *T. simplex* McCallough's Bridge, Waihao, South Canterbury (Tahuian), Upper Eocene p. 99 pl. iv f. 4 sp. nov. New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Tahusyrinx* gen. nov. Cochlespirinae, Turridae type *Parasyrinx finlayi* Allan (Tahuian), Upper Eocene N.Z., A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 24, 30, 68.

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†*Tomopleura clifdenica* pp. 111, 112 pl. xii f. 9, Clifden Southland (Hutchinsonian), Lower Miocene; *T. waiauensis* pp. 111, 112 pl. xii f. 12 Clifden (Awamoan), Middle Miocene; *T. finlayi* pp. 111, 112 pl. xii f. 10, Ardgowan shell bed, near Oamaru (Awamoan), Middle Miocene, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

†*Turridrupa maoria* sp. nov. tuffaceous arenaceous sandstone, Ngatopa, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 p. 117 pl. xi f. 10.

†*Uttleya* Marwick 1934 type o.d. *U. arcana* Marwick, now removed from Turridae and the author inclines to place it in Muricidae, A. W. B. POWELL p. 170 Bull. Auckland Inst. Mus. 2 1942.

†*Veziguraleus* gen. nov. Mangeliinae, Turridae, type *V. clifdenensis* sp. nov. (Hutchinsonian), Lower Miocene, Clifden, New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 24, 145 pl. v f. ii.

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†*Viriquisitor* gen. nov. Clavinae, Turridae, type *Drillia virumbilicata* Harris (Balcombian), Middle Miocene, Victoria, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942 pp. 24, 95.

†*Waitara pagodula* sandstone, Montara Point, between Whangara and Tolaga Bay, Gisborne (Urenian or Opoitian), Upper Miocene or Lower Pliocene p. 168 pl. xiv f. 7; *W. liratulata* mudstone and argillaceous sandstone beds, Mangawhero Stream, Tarawarama, Wairoa (Opoitian), Lower Pliocene pp. 168, 169 pl. xiv f. 8 spp. nov. New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

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†*Zemacies armata* Middle Eocene abandoned railway, Waihao Downs, South Canterbury pp. 65, 66 pl. iv f. 6; *Z. awakinoensis* Awakino North S.D., Middle Miocene pp. 65, 67 pl. xiv f. 4, spp. nov., New Zealand, A. W. B. POWELL Bull. Auckland Inst. Mus. 2 1942.

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Bollingeria **subgen. nov.** of *Jaminia* genotype [subgenotype] *Chondrus pre-poides* Krynicki, L. FORCART Verh. naturf. Ges. Basel 51 1 1940 pp. 107, 194.

Imparietula blanda sebastiana **subsp. nov.** Strasse Sivas-Malatya, L. FORCART Verh. naturf. Ges. Basel 51 1 1940 p. 212 pl. ii f. 45, genitalia fig. 9, p. 213.

Vallonia pulchella the hermaphrodite gland and germ cells, M. E. WHITNEY 416.

Vertigo moulinsiana in Ireland, extension of range, A. W. STELFOX 377.

Zoogenetes harpa (Say) in the Rocky Mountains, Wyoming and Colorado, P. L. MARSH 254.

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Opeas elgonense **sp. nov.** Uganda, Mt. Elgon, M. CONNOLLY J. Conch. London 21 11 1942 p. 333 text-fig. 11 p. 329.

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Spiraxis (Rectaxis) paulisculpta **sp. nov.** Santa Maria, San José Province, Costa Rica, H. A. REHDER J. Wash. Acad. Sci. 32 11 1942 p. 350 fig. 18.

Streptostyla (Streptostyla) valerioi **sp. nov.** Cervantes, Cartago Province, Costa Rica, H. A. REHDER J. Wash. Acad. Sci. 32 11 1942 p. 351 fig. 17.

Varicella caymanensis **sp. nov.** Branching of Forest Glen Road from Further Land Road, North Side area p. 7 pl. i f. 6; *V. c. ampla* **subsp. nov.** with the above species p. 8 pl. i f. 5, Moll. of Grand Cayman, H. A. PILSBRY Nautilus 56 1 1942.

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Helicodiscus (Hebetodiscus) intermedius **sp. nov.** Pichevick landing basin, Tennessee River Valley, J. P. E. MORRISON Bull. Bur. Amer. Ethnol. 129 1942 p. 378.—*H. ramsdeni* **sp. nov.** Guaso R. at confluence with Jaibo R. Guantanamo, Cuba p. 55 text-fig. 1a.—*Helix apex* C. B. Ad., text-figs. 1 b c d. *Helicodiscus*, H. A. PILSBRY Nautilus 56 2 1942.

Lacteoluna cistula **sp. nov.** at branching of Forest Glen Road from Further Land Road, North Side area, Grand Cayman, H. A. PILSBRY Nautilus 56 1 1942 p. 5 pl. i f. 7.

Libania **gen. nov.** Daudebardiinae, BOURGIGNAT Ann. de Malac. 1870 p. 164.

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Pseudiscus **subgen. nov.** of *Helicodiscus* type *H. (P.) punctatellus* **sp. nov.** near Whites Cave, Mammoth Cave, Kentucky, J. P. E. MORRISON Bull. Bur. Amer. Ethnol. 129 1942 p. 379.

Rotadiscus pilsbryi **sp. nov.** Santa Maria, San José Province, Costa Rica, H. A. REHDER J. Wash. Acad. Sci. 32 11 1942 p. 352 fig. 10-12.

Striatura Morse and *S. ferrea*, *S. milium*, a question of type species, H. A. PILSBRY 313.

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Atrichoconcha subgen. nov. of *Hemitrichia* type *Hemitrichia* (*Atrichoconcha*) *luteofusciata* Lea, P. BARTSCH Proc. biol. Soc. Washington 55 1942 p. 38. (Key to spp. included p. 39).

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T. IREDALE 196.

Hemitrichia (*Hemitrichia*) *pruinosa zambalesana* subsp. nov. San Antonio, Zambales, Luzon p. 30; *H.* (*H.*) *consimilis sibuyanensis* Island of Sibuyan p. 31; *H.* (*H.*) *consimilis badajosana* Badajoz, Tablas Island p. 31; *H.* (*H.*) *brachytricha albyana* Malinao, Albay Luzon p. 32; *H.* (*H.*) *brachytricha batanensis* Batan Island, off east Luzon p. 32; *H.* (*H.*) *kobelti romblonensis* Romblon Harbour, Romblon Island p. 33; *H.* (*H.*) *setigera quadrasi* Alcala, Cagayan, Luzon p. 34; *H.* (*H.*) *setigera balerana* Baler, Tayabas, Luzon, p. 34; *H.* (*H.*) *setigera casigurana* Sitio Dinog, Casiguran p. 34; *H.* (*H.*) *setigera auitana* Tanit, Apagao, Luzon p. 34; *H.* (*H.*) *setigera makabengana* Makabenga, Nueva, Vizcaya, Luzon p. 34; *H.* (*H.*) *setigera palanana* Paguidin, Palanana Isabella p. 34; *H.* (*H.*) *setigera malupana* Malupa Panay p. 35; *H.* *setigera polilloensis* Polillo Island p. 35; *H.* (*H.*) *setigera batangasana* Iipa, Batangas, Luzon p. 35; *H.* (*H.*) *setigera moellendorffi* Cagayan, Luzon p. 35; subsp. nov. Philippines. [These are formed chiefly on the number of lirations in the sculpture as given in key tables, otherwise they are only described by whorls and measurements], P. BARTSCH Proc. biol. Soc. Washington 55 1942.

Hemitrichia (*Hemitrichia*) *aparriana* sp. nov. Aparri, Cagayan, Luzon p. 35; *H.* (*H.*) *pandana* sp. nov. Pandan, Antiqua Panay p. 36, P. BARTSCH Proc. biol. Soc. Washington 55 1942.—*H.* (*H.*) *hidalgoi matuliana* Mt. Matuli, Luzon p. 37; *H.* (*H.*) *tagalensis principensis* Sitio Ilinos Casiguran, Principe, Luzon p. 38; *H.* (*H.*) *tagalensis mearnsi* Baler Luzon p. 38; subsp. nov., P. BARTSCH Proc. biol. Soc. Washington 55 1942.—*H.* (*Atrichoconcha*) *semisculpta webbi* Dousal, Sorsogon, Luzon; *H.* (*A.*

s. cataduanensis Cataduanes Island; *H.* (*A.*) *s. polagana* Polag Bay, Luzon; *H.* (*A.*) *s. antimonana* Antimonan, Tayabas, Luzon; *H.* (*A.*) *s. woodi* Manila [?] subsp. nov., P. BARTSCH Proc. biol. Soc. Washington 55 1942 p. 40 (key).—*H.* (*A.*) *oblita tayabasana* subsp. n. Baler, Tayabas, Luzon; *H.* (*A.*) *bakeri* sp. n. East Coast of Potello Island; *H.* (*A.*) *panayensis* sp. n. Malupa, Panay, all p. 42; *H.* (*A.*) *luteofusciata* key to subsp. p. 43 *l. libmanana* subsp. nov. Libmanan canarines p. 43; *H.* (*A.*) *l. maculaboensis* subsp. nov. Maculabo Island p. 44; *H.* (*A.*) *l. paracaleana* subsp. nov. Paracale, Luzon p. 44, P. BARTSCH Proc. biol. Soc. Washington 55 1942.

Lepidotrichia subgen. nov. of *Hemitrichia*, type *H.* (*L.*) *purpurascens* Möllendorff, sole sp. of this group, P. BARTSCH Proc. biol. Soc. Washington 55 May 1942 p. 38.

Tengchiena genus nov. Microcystinae, type *Hyalina rathouisii* Heude, H. B. BAKER Nautilus 56 2 1942 p. 41 pl. vi f. 1-2.

Trochonanina pitmani sp. nov. S.W. Uganda p. 330 text-fig. 6-8; *T. liberiae* (A. D. Brown) text-figs. 9, 10; M. CONNOLLY J. Conch. London 21 11 1942.

ACAVACEA.

Ampelita hemioscia (nom. et fig. in Man. Couch. 9. 155 pl. lxi f. 31-33, July 27, 1894) [full description now added], H. A. PILSBRY Nautilus 56 2 1942 p. 49.

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BULIMULACEA.

Coelostemma bourgeoisana sp. nov. on hillside under limestone rocks, Ixtapan de la Sal, Mexico, P. BARTSCH J. Wash. Acad. Sci. 32 6 1942 p. 187 fig. 1.

Cerion caerulescens Mayn. & Clapp, *C. caerulescens* × *C. mcleani*, *C. mcleani*, *C. nudum* Mayn. figs., W. J. CLENCH 85.—*C. bemeniense*, *pillsburyi*, W. J. CLENCH 89.

Drymaeus multilincatus (Say) fig. new to Cuba, M. L. JAUME & P. BORRO 200.

Gymnocentrum, type *Coelocentrum filicosta* (Shuttleworth), **nom. nov.** for *Liocentrum* Pilsbry 1902, non Karsch 1890, H. A. PILSBRY Nautilus Philad. 55 3 1942 p. 105.

Haplocion mariae p. 187 fig. 2, hillside under limestone rocks at Ixtapan de la Sal, Mexico. *H. matherosoni* p. 188 fig. 3 (ex Shimek's collection), collected 1898 Mexico, **spp. nov.**, P. BARTSCH J. Wash. Acad. Sci. 32 6 1942.

Liguus fasciatus osmenti **subsp. nov.** Lower Florida Keys (Pine Islands). Florida, W. J. CLENCH Proc. New Engl. Zool. Cl. 19 1942.

Liocentrum Pilsbry 1902. H. A. PILSBRY 306.

Microceramus caymanensis **sp. nov.** Battle Hill, interior of eastern end of Grand Cayman type from branching of Forest Glen Road from Further Land Road North Side area, H. A. PILSBRY Nautilus 56 1 1942 p. 5 pl. i f. 8.

Naesiotus quitensis antisana **subsp. nov.** slopes of Mt. Antisana Province of Pichincha, Ecuador, H. A. REHDER Nautilus Philad. 55 3 1942 p. 103.

Placostylus (*Euplacostylus*) *seemanni mbengensis* **sp. n.** Mbenga Island, Fiji p. 92 f. 2a b; *P. (Callistocharis) gracilis verrieri* **subsp. nov.** Mbenga Is., Fiji, C. M. COOKE, JR. Occ. Pap. Bishop Mus. Honolulu 17 9. 1942.

Urocoptis scobinata perfecta **subsp. nov.** N. of railway station of San Paz, E. of Guantanamo, Cuba, H. A. PILSBRY Nautilus Philad. 55 3 1942 p. 104.

HELICACEA.

Bunnya type *bernadinae* **gen. et sp. nov.** [Epiphragmophorinae], on wall of the old monastery at El Desierto de los Leones, 9,800 ft., Mexico, H. B. BAKER Nautilus 56 2 1942 p. 37 pl.v.

Candidissima **subgen. nov.** P. PALLARY in Abh. Senckenberg Naturf. Ges. 1910.

Cepolis (*Hemitrochus*) *lewisiaana* **sp. nov.** Battle Hill, interior of eastern end of Grand Cayman, H. A. PILSBRY Nautilus 56 1 1942 p. 4 pl. i f. 14, 14a.

Exiliberus [no separate descr. of genus] *jacksoni* **gen. et sp. nov.** Libyan

Desert Plateau, Western Egypt (cf. p. 719 f. 761 in Thiele Handbuch for general appearance), IREDALE Rec. Aust. Mus. Sydney 21 2 1942 p. 126.

Helicoidea, New South Wales, T. IREDALE 196.

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Helminthoglypta tudiculata, W. M. INGRAM 193.—*H. umbilicata* (Pils.) scalariform specimen hatched in laboratory, G. R. WEBB 410.

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Micrarionta levis **sinistral** from salt flats of Santo Domingo, Baja, California, J. L. BAILY 21.

Mesodon appressus (Say) in Indiana, G. R. WEBB 411.

Plagioptycha euclasta beattyi **subsp. nov.** Mt. Eagle, St. Croix, Virgin Islands, W. J. CLENCH Mem. Soc. cubana Hist. nat. 14 3 1940 p. 244 pl. xlii f. 3.—*P. fosteri* **sp. nov.** Bret's Hill, Long Island, Bahama Islands, W. J. CLENCH Mem. Soc. cubana Hist. nat. 14 1 1940 p. 16 pl. iii f. 4. *Plagioptycha gregoriana* Dall., W. J. CLENCH 89.

Polydonte (*Granodomus*) *maricao* **sp. nov.** 2-3,000 feet western Puerto Rico, W. J. CLENCH Mem. Soc. cubana Hist. nat. 14 3 1940 p. 243 pl. xlii f. 2, 5.—*P. imperator* (Montfort), *P. sobrina* (Férussac), *P. apollo* (Pfeiffer), *P. natensoni* Torre, *P. torrei* Pilsbry anatomical figs., A. MORENO 273.

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Gulella sandersoni S. Nigeria Nko, Opubre District under leaf mould fig. 4; *G. labiotuberculata* Tanganyika Territory fig. 5 **spp. nov.** p. 329; *G. titania adamsiensis* **subsp. nov.** p. 330 Ashanti Adansi, M. CONNOLLY J. Conch. London 21 11 1942.

Gonaxis pseudotmesis **sp. nov.** Gold Coast, Aburi, M. CONNOLLY J. Conch. London 21 11 1942 p. 328 text-figs. 1-3.

Haplotrema minimum Ancey and associated species—feeding habits, W. M. INGRAM 192.

Ouagapia ratusukuni sp. nov. Viti Lerce, Fiji, C. M. COOKE, JR. Occ. Pap. Bishop Mus. Honolulu 17 9 1942 p. 91 f. 1.

Scaphopoda.

DENTALIACEA.

Dentalium (*Antalis*) *pilsbryi* nom. nov. for *D. (A.) pseudohexagonum* "Ihering" Henderson Bull. U.S. Nat. Mus. 111 1920 p. 46, non "Dall" Arnold Mem. Cal Acad. Sci. 3 1903, p. 186, H. A. REHDER *Nautilus* 56 2 1942 p. 69.—†*D. centenniale* sp. nov. Hampden Beach (Bortonian) Eocene, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 279 pl. xxiv f. 26.

†*Prodentalium* gen. nov. Dentaliidae, type *Prodentalium raymondi* Young sp. nov. Pennsylvanian (Carboniferous shales) near Talpa, New Mexico, genus also includes *Dentalium semicostatum* Girty, J. A. YOUNG JR. J. Paleont. Menasha Wis. 16 1 1942 p. 120 pl. xx f. 3-6, 8, 12.

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NUCULACEA.

Heminajas (?) *sibirica* sp. nov. Carnian Trias, Mount Ebetem, Kharaulakh Mountains, Siberia, L. KIPARISOVA Trans. Arctic Inst. Leningrad 91 1937 p. 191, 239 pl. viii f. 17 a-c.

†*Leda* (?) *polaris* sp. nov. Anisian Trias, Cliff Tuora-Khala and Cape Mukhan-krest, mouth of the Olenek River, Siberia, L. KIPARISOVA Trans. arctic Inst. Leningrad 91 1937 pp. 186, 238 pl. v f. 9-11.—*L. Zulbergi* sp. nov. Novaya Zemlya, A. A. PETRENKO Trans. arctic Inst. Leningrad 57 1937 p. 20.

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†*Nuculana* (*Pseudoportlandia*) *tahuia* sp. nov. McCullough's Bridge, Tahuian Stage, p. 268 pl. xxiii f. 1, 2; *N. (Jupiteria) hampdenensis* Hampden Beach p. 269 pl. xxiii f. 4, 6, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942.

†*Ovaleda coustricta* sp. nov. Hampden Beach, Eocene, New Zealand, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 269 pl. xxiii f. 3.

†*Palaeoneilo olenekensis* sp. nov. Anisian, Trias., Cliff Tuora-Khaia, mouth of the Olenek River, Siberia, L. KIPARISOVA Trans. arctic Inst. Leningrad 91 1937 pp. 183, 238 pl. v f. 14.

†*Poroleda antiqua* sp. nov. Hampden Beach (Bortonian) New Zealand, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 269 pl. xxiii f. 5.

†*Yollia* [sic] *arctica* in the Tosno-Sablinka R. basins, ANSBERG & ZNAMENSKAYA 12.

FILIBRANCHIATA.

ARCACEA.

Arca delandensis sp. nov. Pliocene Caloosahatchee marl, De Laud Volusia Co., Florida, W. C. MANSFIELD Bull. Geol. Dept. Conservation Tallahassee Florida 18 1939 p. 49 pl. iv f. 4, 8.

†*Arca millvillensis* sp. nov. Miocene Millville, New Jersey, RICHARDS & HARBISON Proc. Acad. Nat. Sci. Philad. 94 1942 p. 182 pl. vii f. 11, 12.—†*A. (Anadara) yokiensis* sp. nov. Neogene, Japan, K. SAN Taiwan-Chigaku-Kiji 11 2 1940 p. 27.

†*Bathyarca bellatula* sp. nov. Hampden Beach (Bortonian Stage) Eocene, New Zealand, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 269 pl. xxiii f. 14, 15.

†*Cosmetodon* subgen. nov. of *Grammatodon* type *Beushausenia keyserlingi* (Orbigny) 1850, C. C. BRANSON J. Paleont. Menasha Wis. 16 2 1942 p. 248.

†*Macrodon* (*Catella* ?) *tyaughtonae* sp. nov. Trias Tyaughton Creek Valley B.C., F. H. MCLEARN Canad. Field Nat. 56 7 1942 p. 99 pl. i f. 1.—†*M. Buckman* 1845, C. C. BRANSON 61.

†*Macrodon* Beushausen 1895 p. 37 = *Macrodon* Cossmann, C. C. BRANSON 61.

†*Parallelodon* Meek & Worthen 1866, C. C. BRANSON 61.

†*Whitella eardleyi* sp. nov. Middle Ordovician, Trenton, Michigan, R. C. HUSSEY Pap. Mich. Acad. Sci. 26 1941, p. 445, pl. f. 4, 8.

MYTILACEA.

†*Crenella burkei* sp. nov. Upper Cretaceous Asphalt Ridge, Utah, J. P. TOLMACHOFF Ann. Carnegie Mus. Pittsburgh 29 1942 p. 57 pl. i f. 9, 10.

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Mytilus californianus influence of temperature, food, age and sex in the rate of growth, W. R. COE & D. L. FOX 100.—*M.* life habits on West Coast, U.S.A., F. HAAS 172A.—*M. edulis* sterol fraction content, P. FANTL 135.—*M. planulatus* sterol fraction, P. FANTL 135.—*M. edulis* shell movements relative to temperature, V. L. LOOSANOFF 235.—*M.* effect of lime, V. L. LOOSANOFF & J. B. ENGLE 236.—*M. edulis* J. M. N. Y SANZ 349.—*M. californianus* metabolism, B. T. SCHEER 352.—*M. c.* spawning, R. T. YOUNG 442.—*M. c.*, distribution relative to salinity, R. T. YOUNG 441.

†*Mytilus* ? *sheelapsensis* sp. nov. Trias Tyaughton Creek Valley, B.C., F. H. McLEARN Canad. Field Nat. 56 7 1942 p. 102 pl. ii f. 9, 10.

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ANOMIACEA.

†*Pododesmus barnsi* sp. nov. Pliocene ? Shell Creek, Florida, W. C. MANSFIELD Geol. Bull. Dept. Conservation Tallahassee, Florida 18 1939 p. 55 pl. iv f. 1, 3, 5, 6.

TRIGONACEA.

†*Kurinuia* gen. nov. Trigonidae genotype *Trigonia areolata* Marshall Bortonian (Middle Eocene), New Zealand, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 272 pl. xxiii f. 8, 11.

†*Schizodus texanus* sp. nov. (*S. wheeleri* White 1877) Permian Texas, R. L. CLIFTON J. Paleont. Menasha, Wis. 16 6 1942 p. 691 pl. ci f. 20-28, pl. cii f. 10-13.

PSEUDOLAMELLIBRANCHIATA.

PTERiaceA.

†*Cassianella beyrichi* var. *crickmayi* var. nov. Trias, Tyaughton Creek Valley B.C., F. H. McLEARN Canad. Field, Nat. 56 7 1942 p. 99 pl. i f. 5-9.

†*Gervillia arctica* Anisian Trias, Cliff Tuera-Khaia mouth of the Olenek River pp. 242-241, pl. vi f. 14 holotype, 15-18; *G. (?) simkini* Carnian Trias, head of Zyrianka River, Kolynea basin pp. 203, 242 pl. vii f. 2; *G. (?) auritula* Upper Triassic ? Lower Jurassic Kharaulakh Mountains, Tas-Balagan River pp. 205, 242 pl. vii f. 14: spp. nov. Siberia, L. KIPARISOVA Trans. arctic Inst. Leningrad 91 1937.

†*Inoceramus capulus* Shumard, *fragilis* Hall & Meek, *labialis* (Schlottheim), *dimidius* White, W. L. MOREMAN 272.—†*I. mclearni* p. 60 pl. ii f. 1; *I. meshaniensis* p. 61 pl. ii f. 2; *I. furnivali* p. 62 pl. iii; *I. palliseri* p. 62 pl. i f. 2 spp. nov.; *I. barabini inflatiformis* p. 63 pl. ii f. 3; *I. barabini magniumbonatus* p. 63 pl. i f. 1; vars. nov. Cretaceous, Bearpaw formation, Saskatchewan, R. J. W. DOUGLAS Trans. roy. Soc. Can. (3) 36 4 1942.

Pteria xanthia sp. nov. dredged off Captive Island, Florida, J. S. SCHWENDEL Nautilus 56 2 1942 p. 64; Naut. 56 1 1942 pl. iii f. 1, 1a.

PECTINACEA.

†*Lentipecten parki* sp. nov. Hampden Beach, New Zealand Eocene, J. MARWICK Trans. Proc. Roy. Soc. N.Z. 72 3 1942 p. 270 pl. xxiii f. 7, 10, 13.

Pecten circularis inhibition in the slow muscle, A. A. BENSON, J. T. HAYS & R. N. LEWIS 48.—*P. irradians* at Long Island, W. A. DREYER & W. A. CASTLE 121.—*P. imbricatus mildredae* type locality, Biscayne Bay, T. BAYER 44.—*P. maximus* as food, recipes, A. L. SIMON 368.—*P. m.* (L.) Breeding and growth, S. F. LANG 383.

†*Pecten tyaughtonae* p. 162 pl. ii f. 14-16; *P. cadwalladerensis* p. 102 pl. i f. 2-4, 10; *P. poutiamnis* p. 102 pl. i f. 11, 12; spp. nov. Trias, Tyaughton Creek Valley, B.C., F. H. McLEARN Canad. Field Nat. 56 7 1942.—†*P. (Pecten) ochlockoneënsis leënsis* subsp. nov. Buckingham Limestone (Upper Tertiary), South Florida, W. C. MANSFIELD Bull. Geol. Dept. Conservation Tallahassee, Florida 18 1939 pp. 11, 50 pl. ii f. 3, pl. iv f. 9.—*P. † (P.) wendelli olgensis* subsp. nov. Pliocene ? dredged from the Caloosahatchee R., 2 miles above Olga p. 51 pl. ii f. 1, 2, 4; *P. (Chlamys) caloosensis* p. 52 pl. iii f. 1, 3, Upper Miocene,

Caloosahatchee R., 1 m. below Olga; *P. (C.) eboreus buckinghamensis* p. 53 pl. iii f. 4, 5, 8, Buckingham Lee, Co. Fla., Upper Tertiary.—†*P. Neogene* species geographical divisions, fig., J. ROGER 336.

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Ostrea edulis sex-phases, H. A. COLE 102.—*O. virginica*, P. S. GALTISOFF 145.—*O.*, culture in Texas, G. GUNTER 166.—*O.* determination of Glycogen, G. HUMPHREY 189.—*O. gigas, virginica* reactions to *Polydora ciliata*, L. D. KAVANAUGH 206.—*O.* effect of lime, V. L. LOOSANOFF & J. B. ENGLE 236.—*O. virginica* sex reversal, A. B. NEEDLER 279.—*O. v.* experiments with certain drugs and ions on the heart, A. B. OTIS 295.—*O. edulis*, J. M. N. Y SANZ 349.—*O. e., angulata*, as food-recipes, A. L. SIMON 368.

†*Ostrea tholiformis* Etheridge, spec. figd. by Etheridge Geol. surv. W. Austr. Bull. 36 pl. vii f. 3 selected as holotype, C. TEICHERT 388.

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Actinonaias carinata orbis subsp. nov. Pickwick landing basin, Tennessee River Valley, J. P. E. MORRISON Bull. Bur. Amer. Ethnol. 129 1942 p. 361.

Anodonta grandis, Hermaphroditism H. V. D. SCHALLIE & F. LOCKE 350.

Archaeonodon, gen. nov. Unionidae type R. HOWSE Nat. H. st. Trans. Northumberland 1878 7 p. 193. [omission.]

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†*Kolymia* gen. nov. Unionidae type *K. innoceramiformis* Licharew (= *Aphanaia* ?), *K. irregularis* Lich. Carboniferous (Upper Paleozoic), S.E. Kolyma Basin, LICHAREW & EINOR C.R. Acad. Sci. Moscow N.S. 31 2 1941 p. 151.

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†*Naiadites tumida* and *obesa* R. Etheridge, jr., comparisons and variations, D. LEITCH 227.

Obovaria subrotunda globula subsp. nov. Pickwick Landing Basin, Tennessee River Valley, J. P. E. MORRISON Bull. Bur. Amer. Ethnol. 129 1942 p. 360.

Quadrula biangulata sp. n. Pickwick Landing Basin, Tennessee River Valley, J. P. E. MORRISON Bull. Bur. Amer. Ethnol. 129 1942 p. 356.—*Q. quadrula, Q. q. fragosa, q. apiculata aspersa, q. apiculata apiculata, q. apiculata rumphiana*, vars. J. K. NEEL 280.

†*Trigonodus* (?) *praelongus* spp. nov. Anisian, Trias, Northern outskirts of the Kharacelakh mountains, right bank of the Kieenias River, 10 km. above its mouth. Siberia, L. KEPARISOVA, Trans. Arctic Inst. Leningrad 91 1937, pp. 187, 239, pl. viii, f. 3-8, 10, holotype f. 1.

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†*Meretrix meretrix ninoheensis* subsp. nov. Ninohe District, Mutu Province, N.-E. Honshū, Japan, K. M. HATAI Bull. Biogr. Soc. Japan 10 9 1940 p. 119.

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†*Venerupis grata tarda* var. nov. Kettleman Hills Oilfield, California, WOODRING, STEWART & RICHARDS Prof. Pap. U.S. Geol. Surv. 195 1940 p. 94 pl. xiii f. 10-13.

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†*Spisula iwatensis* sp. nov. Ninohe District, Mutu Province, N.-E. Honshū Japan, K. M. HATAI Bull. Biogr. Soc. Japan 10 9 1940 p. 119.

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WOODRING, STEWART & RICHARDS Prof. Pap. U.S. Geol. Surv. **195** 1940 p. 93 pls. xxiv f. 3: pl. xxix f. 12, pl. xxix f. 3.

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†*Cuneamya childsi* sp. nov. Middle Ordovician, Trenton, Groos Quarry, near Escanaba, Michigan, R. C. HUSSEY Pap. Mich. Acad. Sci. **26** 1941 p. 446 pl. i f. 15.

†*Mya arenaria kitahakaokaensis* subsp. nov. Ninohe District, Mutu Province, N.-E. Honsyû, Japan, K. M. HATAI Bull. Biogr. Soc. Japan **10** 9 1940 p. 119.

†*Myalina (Myalina) cophia* pp. 4, **49** pl. vii f. 3, limestone top of Webber's Falls sandstone, Atoka formation (Lampasan) Verdigris R. Okay, Oklahoma; *M. (M.) lepta* pp. 4, **49** pl. iii f. 6 a.b. 9 a.b. argillaceous shales, Middle Boggy formation (Desmoinesian) Oklahoma; *M. (M.) wyomingensis* pp. 4, **51** pl. xiv f. 15, 16, local dolomite limestone, Red Mountain, Wyoming; *M. (M.) arbata* pp. 4, **52** pl. vii f. 9-10, Carbonaceous phase of the Winterset limestone Missourian series, Kansas; *M. (M.) glossoidea* pp. 4, **53** pl. vii f. 1a, b, 57, 8 a.b., early Virgilian, nr. Holmwood, Franklin Co., Kansas; *M. (M.) miopetina* pp. 4, **54** pl. iii f. 5a.b. 8 a.b.; Lecompton Limestone (lower Virgilian), Kansas; *M. (M.) petina* pp. 4, **54** pl. vi f. 2a-3b, Virgilian, 6 m. W. of Cisco, Texas; *M. (M.) pliopetina* pp. 4, **54** pl. vi f. 1a.b, 6, McKenzie's Trail, near Ft. Griffin, Shackelford Co., Texas, spp. nov.; *M. (Orthomyalina subgen. nov. q.v.) slocomi parvula* var. nov. pp. 4, **58** pl. x f. 2, 3, early Virgilian, Tecumseh formation, central

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†*Myalinella subgen. nov.* of *Myalina* type *Myalina meeki* Dunbar Desmoinesian (?) to lower Leonardian U.S.A. N. D. NEWELL Univ. Kansas, State Geol. Surv. (Lawrence) Kansas **10** 2 1942 pp. 4, **60** pl. xiv f. 7-14.

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†*Orthomyalina subgen. nov.* of *Myalina* type *Myalina slocomi* Sayre Desmoinesian-Wolfcampian (Pennsylvanian-Permian), U.S.A., N. D. NEWELL Univ. Kansas State Geol. Surv. (Lawrence) Kansas **10** 2 1942 pp. 4, **56** pl. viii f. 1-6, pl. x f. 6.

Physoida [gen. nov.] for *Corbula physoides* Deshayes, expl. in Algeria moll. p. 234 pl. xxii f. 4-6, P. PALLARY J. de Conchyl. Paris **48** 1900 p. 409 [omission].

†*Platyodon colobus* "WOODRING" sp. nov. Kettleman Hills Oilfield, California, WOODRING, STEWART & RICHARDS Prof. Pap. U.S. Geol. Surv. **195** 1940 p. 95 pl. xxi f. 1, 2.

†*Promytilus gen. nov.* pp. 8, **37** of Mytilidae, type *P. annosus* sp. nov. Missourian series, Pennsylvanian Kansas pp. 3, **37**, **38** pl. i f. 9, 10; *P. annosus annosus* pp. 3, **38** fig. as genotype; *P. annosus senex* pp. 3, **39** Oolitic Limestone of the Westerville and Drum formations, Kansas; var. nov. *P. priscus* pp. 3, **40** pl. i f. 1, 2, 5-7, Tarkio Limestone (Wabawnee) Kansas; *P. retulus* pp. 3, **42** pl. i f. 3, 4; Wolfcampian age, Neosho R., Kansas: spp. nov. Paleozoic Pelecypods, N. D. NEWELL Univ. Kansas State Geol. Survey **10** 2 1942.

†*Selenimyalina gen. nov.* Mytilidae, type *Myalina meliniformis* Meek & Worthen, Upper Desmoinesian [Pennsylvanian] to Missourian or Virgilian? pp. 5, **63** pl. ii f. 1, 2; *S. dotti* pp. 5, **64** pl. ii f. 7, 8, Middle Holdenville formation, Oklahoma; *S. quadrata* pp. 5, **64** pl. ii f. 3 a.b, Argillaceous Shale, Vilas formation, brick plant of Kansas State Prison, Lansing, Kansas: spp. nov. Paleozoic, N. D. NEWELL Univ. Kansas State Geogr. Surv. (Lawrence) Kansas **10** 2 1942.

†*Septimyalina* gen. nov. Mytilidae, type *Myalina perattenuata* Meek, Lam-pasian-Virgilian, Pennsylvanian pp. 5, 64 pl. xii f. 3-12; *S. burmai* pp. 5, 67 pl. xii f. 1-6; Council Grove, Chase Lower Permian, *S. orbiculata* pp. 5, 68 pl. xi f. 1-3, Upper Marmaton Group, near Beggs, Oklahoma; *S. quadrangularis* pp. 5, 69 pl. xii f. 7-9 Savanna sandstone (Middle Desmoinesian) near Pittsburg, Oklahoma; spp. nov., N. D. NEWELL Univ. Kansas State Geol. Surv. (Lawrence) Kansas 10 2 1942.

†*Volsellina* gen. nov. Mytilidae type *Pleurophorus subellipticus* Meek, Pennsylvanian, N. D. NEWELL Univ. Kansas State Geol. Surv. Lawrence Kansas 10 2 1942 pp. 4, 42 pl. i f. 14-16.

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†*Thracia kamayasikiensis* sp. nov. Ninoke District, Mutu Province, N.-E.

Honsyû, Japan, K. M. HATAI Bull. Biog. Soc. Japan 10 9 1940 p. 119.—†*T. hitosaoensis* Nomura figured and original description given, K. HATAI 175.

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†*Danaoceras* (?) *bindiense* sp. nov. Middle Devonian, Bindi, East Gippsland, Victoria, C. TEICHERT J. Roy. Soc. W. Australia 26 (1939-1940) 1941 p. 65 pl. i f. 1, pl. iv f. 10, 12.

†*Domatoceras bradyi* Kaibab limestone, Arizona pp. 721, 734 pl. xvi f. 5, 6, pl. cxvii f. 2 text-figs 1G, 1H; *D. northropi* Chupadera formation near Bluewater Dane, New Mexico p. 735 pl. cxi f. 7, 8; *D. walteri* San Andres limestone, W. side of Penasco River Valley, New Mexico p. 737 pl. cxvii f. 1 text-fig 1F; spp. nov. Permian, U.S.A., A. K. MILLER & A. G. UNKLESBAY J. Paleont. Menasha Wis. 16 1 1942.

Endoceras yabei, *E. hayasakai*, *E. watanabei* spp. nov. Ordovician, N. China, T. OBATA Abst. 65, J. Shanghai Sci. Inst. 9 1940 pp. 303-308 figs.

Exomegoceras gen. nov. Nautilacea type, *E. wyomingense* sp. nov. Ordovician Bighorn Dolomite, Northern Bighorn Mountains, Wyoming, A. K. MILLER & J. B. CARRIER J. Paleont. Menasha Wis. 16 5 1942 p. 541 pl. lxxvi f. 1-4 text-fig. 2.

†*Hemipiloceras hanzawai* sp. nov. Ordovician, N. China, T. OBATA Abst. 65, J. Shanghai Sci. Inst. 9 1940 pp. 303-308 figs.

†*Huanghoceras obliquicostatum* lower part of middle beds of the Magdalena group in Taos Canyon p. 123 pl. xx f. 2; *H. percostatum* near Talpa p. 123 pl. xx f. 1; *H. collinum* near Talpa p. 123 pl. xx f. 9-11 spp. nov. Carboniferous U.S.A., J. A. YOUNG J. Paleont. Menasha Wis.

†*Kailuanoceras suchuansuense* **gen. et sp. nov.** Ordovician Japan, T. OBATA Abst. 66 J. Shanghai Sci. Inst. 9 1940 pp. 293-302 figs.

†*Linckengoceras* **gen. nov.** *L. nagasi* type; *L. yamaneii*, *L. oishii*, *L. sugiyamai* **spp. nov.** Ordovician, N. China. T. OBATA Abstract 65, J. Shanghai Sci. Inst. 9 1940 pp. 303-318 figs.

†*Metacoceras biseriatum* pp. 721, 724 pl. cxiii f. 1 Kaibab limestone, Arizona; *M. aberrans* p. 725 pl. cxiii f. 4, pl. cxiv f. 4 Chupadera formation Bluewater Dam, New Mexico **spp. nov.** Permian, A. K. MILLER & A. G. UNKLESBAY J. Paleont. Menasha Wis. 16 1 1942.

†*Metaspyroceras subclavatum* **sp. nov.** Ordovician, Bighorn Mountains, Wyoming, A. K. MILLER & J. B. CARRIER J. Paleont. Menasha Wis. 16 5 1942 p. 536 pl. lxxv f. 5.

†*Mooreoceras ovale* **sp. nov.** Pennsylvania, nr. Talpa, New Mexico, J. A. YOUNG JR. J. Paleont. Menasha Wis. 16 1 1942 p. 121 pl. xx f. 10, 14.—†*M. gigantea* **sp. nov.** Acme member of the Blaine (Permian), Texas, R. L. CLIFTON J. Paleont. Menasha Wis. 16 1 1942 p. 695 pl. ciii f. 4-6.

†*Neokaipingoceras* **gen. nov.** for *N. fenghuangschanense* **sp. nov.** Ordovician, N. China, T. OBATA Abst. 65 J. Shanghai Sci. hist. 9 1940 pp. 303-318 figs.

†*Neumatoceras dartoni* **sp. nov.** Ordovician, Bighorn Mountains, Wyoming, A. K. MILLER & J. B. CARRIER J. Paleont. Menasha Wis. 16 5 1942 p. 538 pl. lxxvii f. 4.

†*Proterokaipingoceras saloi* **gen. et sp. nov.** Ordovician Japan, T. OBATA Abst. 66 J. Shanghai Sci. Inst. 9 1940 pp. 293-302 figs.

†*Pseudometacoceras variabile* **sp. nov.** Carboniferous, shales near Talpa, J. A. YOUNG J. Paleont. Menasha Wis. p. 124.

†*Pseudorthoceras splendens* **sp. nov.** Acme member of the Blaine formation, Texas, R. L. CLIFTON J. Paleont. Menasha Wis. 16 1 1942 p. 694 pl. cii f. 1, 2 pl. ciii f. 1.

†*Richardsonoceras bighornense* **sp. nov.** Ordovician, Bighorn Mountains, Wyoming, A. K. MILLER & J. B. CARRIER J. Paleont. Menasha Wis. 16 5 1942 p. 539 pl. lxxvii f. 5.

†*Stenopoceras cooperi* **sp. nov.** Upper shaly beds of the Neva Limestone (Upper Grenola limestone) near Cowley-Elk county-line, near Grand Summit Kansas (Permian U.S.A.), A. K. MILLER & A. G. UNKLESBAY J. Paleont. Menasha Wis. 16 1 1942 p. 736 pl. cxiii f. 2, 3.

†*Tainoceras murrayi* Osage Co., Oklahoma p. 729 pl. cxiv f. 2, 3; *T. schellbachi* Karbab limestone, Hilltop, Grand Canyon, Arizona p. 739 pl. cxiv f. 1, pl. cxv f. 3, 4, pl. cxvi f. 1-4; *T. rotundata* San Andres limestone, W. side of Penasco, R. valley 52 m. W. of Artesia, New Mexico p. 730, 732 text-figs. 2 and 3a, **spp. nov.** Permian, A. K. MILLER & A. G. UNKLESBAY J. Paleont. Menasha Wis. 16 1 1942.

†*Treptoceras* **gen. nov.** Sactoceratidae, Nautiloidea, genotype *Orthoceras duseri* Miller Waynesville formation of the Richmond of Cincinnati area p. 15; *T. persiphonatum* p. 17 pl. iv f. 1-2; *T. perseptatum* p. 18 pl. i f. 1, pl. iii f. 6; *T. praenuntium* p. 19 pl. i f. 2, & **spp. nov.** Cynthiana limestone, Kentucky (Ordovician), R. H. FLOWER Bull. Amer. Paleont. Ithaca 27 103 1942.

†*Trifurcatoceras* **gen. nov.** type *T. makamurai*; *T. bershoi* **spp. nov.** Lincheng formation [Ordovician] of Hupei, N. China, T. OBATA Abstract 65 J. Shanghai Sci. Inst. 9 1940 pp. 303-318 figs.

†*Wadeoceras australe* Teichert 1939, emended diagnosis, C. TEICHERT J. Roy. Soc. W. Australia 26 (1939-1940) 1941 p. 61 pl. i f. 2, 3, pl. ii f. 4-6.

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†*Amphiscapha* **gen. nov.** type *Straparolus (Euomphalus) reedsi* Knight 1934, J. B. KNIGHT J. Paleont. Menasha Wis. 16 4 1942 p. 488.

†*Belemnopsis alfurica, incisa*, C. TEICHERT 390.

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†*Bucania buckwalteri* sp. nov. Middle Ordovician Trenton, Escanaba River, near Cornell, Michigan, R. C. HUSSEY Pap. Mich. Acad. Sci. 26 1941 p. 447 pl. i f. 5-7.

†*Cymatospira* gen. nov. Bellerophonitidae type *Bellerophon montfortianus* Norwood and Pratten 1855 (p. 74), J. B. KNIGHT J. Paleont. Menasha Wis. 16 4 1942 p. 487.

†*Lorobucania* gen. nov. Bellerophonitidae type *Bellerophon lindsleyi* Safford 1869 (pl. G), J. B. KNIGHT J. Paleont. Menasha Wis. 16 4 1942 p. 487.

Stegocoelia wortheni nom. nov. for *Loxonema quadricarinatum* Worthen 1884 (p. 24) now referred to *Stegocoelia* (non S. g. McCoy 1844), J. B. KNIGHT J. Paleont. Menasha Wis. 16 4 1942 p. 488.

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†*Arctoceras primus* sp. -nov. Trias, Anisian; mouth of the Olenek River, Cliff Tuora-Khaia, Siberia, L. KIPARISOVA Trans. arctic Inst. Leningrad 91 1937 pp. 143, 229 pl. i f. 5 text-fig. 5.

†*Aristoceras* gen. nov. Eumorphoceratidae type *A. chkalovi* Upper Carboniferous includes forms of the Upper Carboniferous under "*Uralites*" in lit. as opposed to those forms referred to from the Artinskian "*Uralites*," RUZHENCEV C.R. Acad. Sci. Moscou N.S. 27 5 1940 p. 524 f. 1, n.sp. f. 2, 3 pp. 526, 527.

Artinskia notabilis sp. nov. Lower Permian, Urals, MAXIMOVA & RUZHENCEV C.R. Acad. Sci. Moscou 28 2 1940 p. 161.

†*Barroisiceras trinodosum* pp. 212 pl. xxxiii f. 1, 2 text-figs. 2a; *B. brittonense* p. 212 pl. xxxiii f. 3 text-fig. 2b; spp. nov. Eagle Ford formation [Cretaceous], Texas, W. L. MOREMAN J. Paleont. Menasha Wis. 16 2 1942.

†*Collotia fraasi inermis* subsp. nov. Welschwegli, Athleta zone, A. ERNI Mitt. naturf. Ges. Solothurn 10 1934 pp. 124, 137 fig. 6.

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subinvoluta sp. et var. nov. pp. 64, 86, 95 pl. ii f. 7, pl. iii f. 6 text-fig. 6; Carboniferous, Novaya Zemlya, L. S. LIBROVITSCH Trans. Arctic Inst. Leningrad 101 1938.

Cyclolobus the genus well represented in the Permian ammonoids of Greenland, MILLER & FURNISH 262.

†*Daixites* gen. nov. Medicottiidae type *D. meglitzkyi* sp. n. Upper Carboniferous Ural and Sakmara rivers, V. E. RUZHENCEV C.R. Acad. Sci. Moscou N. S. 30 9 1941 pp. 880, 881 figs. 1, 2.

†*Danaoceras subtrigonum* (McCoy) figs., C. TEICHERT 389.

†*Danubites borealis* sp. nov. Anisian, Trias, Kharaulakh Mountains, Mt. Khalanchekur basin of Omotoi River, Siberia, L. KIPARISOVA Trans. arctic Inst. Leningrad 91 1937 pp. 169, 236 pl. iv f. 6 text-figs. 32 a-b.

Diestoceratidae fam. nov. *Diestoceras*, *Wetherbyoceras*, *Herkimeroceras*, *Pachtoceras*, C. TEICHERT J. Roy. Soc. W. Austrl. 25 1939 p. 107.

†*Distichoceras quenstedti* sp. n. Oxfordian Stierenberg Athleta-Schichten, A. ERNI Mitt. naturf. Ges. Solothurn 10 1934 pp. 123, 134 f. 4.

†*Diploceras rectangulare elegans* p. 15 pl. i f. 15a-c 16 pl. iii f. 7; *D. symmetricum* p. 16 pl. i f. 17a-c, 18a-b, 19a-b, pl. iii f. 8; vars. nov. Cretaceous Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1942.

†*Dorsetensia clerkei* Crick, note and fig., L. F. SPATH 375.

†*Ectenolites endoi* sp. nov. Ordovician Japan, T. OBATA Abst. 66 J. Shanghai Sci. Inst. 9 1940 pp. 293-302 figs.

†*Elobiceras primordiale* sp. nov. p. 101 pl. xxiii f. 2a-c; *E. irregulare rigidecostata* var. nov. p. 104 pl. xxv f. 1a-c pl. xxxv f. 2; *E. spathianum* sp. nov. p. 105 pl. xxxv f. 2a-b, pl. xxxv f. 3 text-figs. 11a-c; *E. oxytropidoceratoides* sp. nov. p. 107 pl. xxvi f. 2-5, pl. xxvii f. 1 text-figs. 13a; *E. o. minor* var. nov. p. 108 pl. xxiii f. 5a-c; *E. raymondi* sp. nov. p. 114 pl. xxviii f. 4-6 pl. xxix f. 1-3, pl. xxx f. 1a-3, pl. xxxv f. 4-10 text-fig. 12c; *E. r. tenuis* var. nov. p. 116 pl. xxx f. 2-4; *E. hexagonum* sp. nov. p. 118 pl. xxx f. 5-8, pl. xxxi f. 1 text-figs. 12d, 13c;

E. browni sp. nov. p. 120 pl. xxxi f. 2-3. pl. xxxii, f. 1a-c text-fig. 12e; Cretaceous Ammonites from Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1 1943.

†*Emilites plummeri* sp. nov. Upper Carboniferous, Ural R., V. E. RUZHENCEV C.R. Acad. Sci. Moscou N.S. 30 9 1941 p. 885 f. 1, 2.

†*Eubaculites otacodensis* (Stoliczka), L. F. SPATH 276.

†*Eucalycoceras dentonense* pp. 196, 205 pl. xxxiii f. 4, 5 text-fig. 2k; *E. indianense* pp. 196, 206 pl. xxxiii f. 9, 10 text-fig. 2d; *E. lewisvillense* pp. 196, 206 pl. xxxiii f. 6, 7 text-fig. 2 n.u.; spp. nov. Eagle Ford formation [Cretaceous] Texas, W. L. MOREMAN J. Paleont. Menasha Wis. 16 2 1942.

†*Galtoceras kimberleyense* sp. nov. Mt. Pierre, Western Kimberley District, Western Australia, Devonian, C. TEICHERT J. Roy. Soc. W. Austrl. 25 1939 p. 110 pl. i f. 4, 5.

†*Gaudryceras aenigma* sp. nov. cretaceous Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1 1943 p. 167 pl. xlii f. 3a-d, pl. xlix f. 2 a-b text-figs. 24 a-d.

†*Gaudryceras* (*Anagaudryceras*) *utatarense* subgen. and sp. nov., Upper Cretaceous Japan, S. SHIMIZU J. Shanghai Sci. Inst. Sec. 2 1 1935 pp. 159-226.

†*Glyptophiceras nielsenii* suture line, fig., J. N. POPOV 317.

†*Greenlandoceras*, T. OBATA 287.

†*Hamitoides angolanus* sp. nov. Cretaceous Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1 1943 p. 187 pl. xlv f. 3a-c text-figs. 28 a-b.

†*Hauericeras durga* Forbes fig., L. F. SPATH 376.

†*Hollandites pressus* pp. 174, 237 pl. iv f. 9 10 hototype text-fig. 35; *H. (?) nikolaevi* pp. 175, 237 pl. iv f. 8 text-fig. 36; spp. nov. Trias, Anisian; Mount Kharan-lakh basin of Omoloi River, Kharan-lakh Mountains, Siberia, L. KIPARISOVA Trans. arctic Inst. Leningrad 91 1937.

†*Hopeioceras* type is *Proterocameroceras mathieni* Grabau, *Hopeioceras* does not have the nepionic bulb of *Proterocameroceras*, T. OBATA 288.

†*Hoplites ingens* suture line fig., J. N. POPOV 317.

†*Hungarites probus* Anisian, Mouth of Olenek River, Cliff Toura-Khaia pp. 146, 230 pl. ii f. 1-3 text-figs. 7-11 (holotype f. 2); *H. involutus* Anisian, Mouth of Olenek River, Cliff Toura-Khaia, northern outskirts of the Kharaulakh Mountains pp. 150, 231 pl. ii f. 7-11 text-figs. 12-14 (holotype f. 10); **spp. nov.** Trias; *H. involutus laevis* **var. nov.** loc. as typical example pp. 151, 232 pl. ii f. 12, pl. iii f. 1; *H. arcticus* Anisian, left head of Adirkai River, Kharaulakh Mountains pp. 232, pl. iii f. 3-4 holotype f. 4 text-figs. 17-18; *H. gusevi* Anisian, Northern outskirts of Kharaulakh Mountains pp. 157, 233 pl. iii f. 8 text-figs. 21; *H. granulosus* Anisian, Mouth of Olenek River, Cliff Toura-Khaia pp. 159, 234 pl. iii f. 7 text-figs. 21a-b; **spp. nov.** Trias, Siberia, L. KIPARISOVA Trans. arctic Inst. Leningrad **91** 1937.

†*Hysterocheras varicosum rarecostata* p. 24 pl. i f. 22a-b text-fig. 2e; *H. orbignyi minor* p. 26 pl. ii f. 18-26, pl. iii f. 13-14, pl. iv f. 1-5 text-fig. 2f, 3a; *H. o. evoluta* p. 28 pl. iv f. 6a-b, 7; *H. binum lobitoensis* p. 30 pl. iv f. 13-18, pl. vi f. 5a-6b text-figs. 3b, 4b; *H. b. angusteumbilicata* p. 32 pl. iv f. 20-22, pl. vi f. 7; **vars. nov.** *H. falcicostatum* p. 35 pl. iv f. 24-28, pl. vi f. 9-11 text-figs. 4d-e; *H. intermedium* p. 36 pl. v f. 1-5, pl. ix f. 1 text-fig. 4f; **spp. nov.** *H. i. compressa* p. 37 pl. v f. 6; *H. carinatum robustecostata* p. 39 pl. v f. 18a-b, pl. vii f. 1, 2, 4; *H. c. exigua* p. 40 pl. vii f. 5-7 text-figs. 5b; **vars. nov.** *H. semiteve* p. 42 pl. v f. 19a-c, pl. vii f. 8-11 text-fig. 5c-d; **sp. nov.**; *H. s. elegans* p. 43 pl. v f. 20a-b, pl. vii f. 12a-c, pl. ix f. 3 text-fig. 5e; *H. s. densicostata* p. 44 pl. v f. 21a-b text-figs. 5 g-h; *H. propinquum* p. 45 pl. v f. 23 a-d, pl. viii f. 14a-c; **sp. nov.**; from the Cretaceous Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. **81** 1 1942.

†*Imitoceras pfefferae* **sp. nov.** 1 m. E. of Valmeyer, Monroe Co., Illinois, Fern Glen limestone [Carboniferous], A. K. MILLER & C. WERNER J. Paleont. Menasha Wis. **16** 4 1942 p. 480 text-figs. 2a-c.

†*Japonites olenchensis* **sp. nov.** Anisian Trias, mouth of the Olenek River, Cape Tumul, Siberia, L. KIPARISOVA Trans. arctic Inst. Leningrad **91** 1937 pp. 172, 236, pl. iv f. 7 text-fig. 34.

†*Kaipingoceras attenuatum* (Grabau) (*Camerocheras attenuatum* Endo, and *K. elongatum* Stum and O. are synonyms), and *K. cylindricum* **sp. nov.** split from *Suecoceras attenuatum* Grab. *K. styleforme* (Grab.) and *K. slenderiformis* **sp. nov.** split from *Camerocheras styli-forme* Grab. Ordovician Japan, T. OBATA Abst. 67 J. Shanghai Sci. Inst. **9** 1940 pp. 273-286 figs.

Karoceratidae **fam. nov.** for *Karoceras*, *Wissenbachia*, *Conostichoceras*, *Turnoceras*, *Poteriocerina*, *Mingano-ceras*, *Elenoceras*, C. TEICHERT J. Roy. Soc. W. Austl. **25** 1939 pp. 107, 112.

†*Knightites* **gen. nov.** Bellerophonitidae type *K. multicornutus* **sp. nov.** Deer Creek limestone, Virgil series, Pennsylvanian, north-eastern Kansas, R. C. MOORE Univ. Kansas State Geol. Surv. Lawrence Kansas, Bull. **38** 1941 Rep. Part 4, pp. 121, 149, 153 pl. iii f. 1a-10b text-figs. 5AB.

†*Kossmaticeras* **sp. nov.** ? aff. *aemilianus* Stoliczka, L. F. SPATH 376.

Lambeoceras lambei (Whiteaves), East Selkirk Manitoba figs., E. LEITH 228.

Medlicottia vetusta **sp. nov.** p. 161, MAXIMOVA & RUZHNEV 256.

†*Metalegoceras striatum* **sp. nov.** Permian, Western Australia, C. TEICHERT J. Paleont. Menasha Wis. **16** 2 1942 pp. 221, 230 pl. xxxv f. 1.

†*Metadaraelites serotinus* **sp. nov.** Lower Permian Urals, MAXIMOVA & RUZHNEV C.R. Acad. Sci. Moscou **28** 2 1940 p. 161.

†*Metapronorites* **gen. nov.** genotype *Pronorites uralensis* var. *timorensis* Haniel, includes ? *Pronorites pseudotimorensis* Miller Carboniferous, L. S. LIBROVITCH Trans. arctic Inst. Leningrad **101** 1938 pp. 82, 104, 101 1938.

†*Metoicoceras ornatum* **sp. nov.** Eagle Ford formation [Cretaceous] Texas, W. L. MOREMAN J. Paleont. Menasha Wis. **16** 2 1942 pp. 196, 211 pl. xxxii f. 4 text-fig. 2c.

†*Neumatoceras carisoni* **sp. nov.** Cynthiana limestone (Ordovician), Kentucky, R. H. FLOWER Bull. Amer. Paleont. Ithaca **27** 103, 1942 p. 23 pl. iii f. 3-5, pl. iv f. 9.

†*Neocrimites* gen. nov. *Adrianitidae* type *Adrianites fredericksi* Emeliancev Ural Mountains, Artinskian [Lower Permian], V. E. RUZHENCEV C.R. Acad. Sci. Moscou N.S. 26 8 1940 p. 838 f. 1, 2.

†*Neoglyphioceras*, a species found in the Tanhouse beds, Gloucestershire, S. SMITH 372.

†*Neoharpoceras conditum* sp. nov. (Albian) Hanha, Angola, O. HAAS J. Paleont. Menasha Wis. 16 5 1942 p. 648 pl. xciv f. 12a-d.—†*N. angolani* sp. nov. Cretaceous Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1943 p. 135 pl. xxxiv f. 2, pl. xxxvi f. 1a-b text-fig. 16.

†*Neokentroceras choffati crassinodosa* var. nov. p. 50 pl. vii f. 19a-d; *N. costatum* sp. nov. p. 52 pl. viii f. 20-25, pl. ix f. 5a-c, text-figs. 6 b-d; *N. c. tenuis* var. nov. p. 53 pl. vii f. 26, 27, pl. viii f. 1a-c text-fig. 6e-f; *N. magnum* sp. nov. p. 53 pl. viii f. 2-6, pl. ix f. 6 text-fig. 6g; *N. pseudovaricosum gracilis* var. nov. p. 59 pl. viii f. 10-13, pl. ix f. 9 text-fig. 6-7 m.; *N. speciosum* p. 61 pl. viii f. 14-17, pl. ix f. 10a-b text-figs. 6n-o; *N. s. rudis* var. nov. p. 63 pl. viii f. 18, 19 text figs. 6p; *N. singulare* sp. nov. p. 64 pl. ix f. 1, pl. x f. 1a-c text-fig. 6r-s.; from the Cretaceous, Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1 1942.

Nothoceratidae fam. nov. includes *Lorieroceras Nothoceras*, C. TEICHERT J. Roy. Soc. W. Austral. 25 1939 p. 108.

†*Okioceras foerstei* nom. nov. for *Kionoceras myrica* (H. & W.) Foerste 1928 pl. lxiii f. 1, pl. lxxv f. 14 this sp. being genotype of *Okioceras*, T. OBATA Abstr. 64 J. Shanghai Sci. Inst. 9 1940 pp. 259-272.

Ohioceratidae, T. OBATA 287.

Oocerinidae fam. nov. includes *Oocerina*, *Blakeoceras*, *Perimeroceras*, C. TEICHERT J. Roy. Soc. W. Austral. 25 1939 p. 107.

†*Oonoceras planiseptatum* p. 31 pl. i f. 9-10, pl. ii f. 6; *O. acutum* p. 32 pl. ii f. 3-5; *O. (?) brevidomum* p. 33 pl. ii f. 1-2; *O. multicameratum*, p. 34 pl. iii f. 1-2; *O. gracilicurvatum* p. 35 pl. iv f. 3-5; *O. triangulatum* p. 36 pl. iv f. 6-8; *O. suborthoforme* p. 38 pl. i f. 11 spp. nov.; *O. triangulatum cylindratum* p. 37 pl. i f. 3-4 var. nov.: Cynthia

limestone (Ordovician) Kentucky, U.S.A. U.S.A., R. H. FLOWER Bull. Amer. Paleont. Ithaca 27 103 1942.

†*Paragastrioceras wandageense* sp. nov. Permian, Western Australia, C. TEICHERT J. Paleont. Menasha Wis. 16 2 1942 p. 226 pl. xxxv f. 9, 10.

†*Paragoniatites* gen. nov. genotype *Gastrioceras camyanum* Girty Carboniferous, L. S. LIBROVITCH Trans. Arctic Inst. Leningrad 101 1938 pp. 81, 103.

†*Peltoceras (Rursiceras) subfilatum* sp. n. Schafgraben Athleta-zone, A. ERNI Mitt. naturf. Ges. Solsthum 10 1934 p. 135 f. 5.

†*Pennoceras seamani* gen. et sp. nov. Brush Creek limestone, Conemaugh formation, Creighton Penn., A. K. MILLER & A. G. UNKLESBAY Ann. Carnegie Mus. Pittsburgh 29 1942 pp. 128, 147 pl. viii f. 7-13.

Perisphinctes couffoni n. m. [nom. nov.] for *P. pottingeri* Couf. non Sow., A. ERNI Mitt. naturf. Ges. Solothurn 10 1934 p. 124.

†*Pervinquieria arietiformis levicostata* var. nov. p. 647 pl. xciii f. 19a-b; *P. bassleri* sp. nov. p. 648 pl. xciv f. 2a-b; both from the Albion, Hanha Angola, O. HAAS J. Paleont. Menasha Wis. 16 5 1942.—†*P. margaritata* sp. nov. p. 70 pl. x f. 5, 6a-b, pl. xxii f. 1; *P. romeri* sp. nov. p. 73 pl. xi f. 1a-c, 2a-c text-fig. 7a; *P. romeri fastigata* var. nov. p. 74 pl. xiii f. 1a-b; *P. perarmata* sp. nov. p. 74 pl. xii f. 1a-c; *P. barbouri* sp. nov. p. 75 pl. xii f. 2a-c; *P.;* *P. howelli* sp. nov. p. 76 pl. xiii f. 2a-c, 3 text-fig. 7b; *P. proteus* sp. nov. p. 77 pl. xiv f. 1a-d; *P. monraynaudensis* "new name" [sp. nov.] var *gracilis* var. nov. p. 80 pl. xiii f. 4a-c text-fig. 7d; *P. simplex tenuis* var. nov. p. 81 pl. xvi f. 1a-c text-figs. 7e-8a; *P. vicina* "new name" [sp. nov.] p. 82=*Inflatoceras* sp. n. ? aff. *gregoryi* Spath 1922 p. 127 pl. iii f. 2; *P. vicina evoluta* var. nov. p. 83 pl. xvi f. 3a-c text-fig. 8c; *P. ferecostata* sp. nov. p. 86 pl. xvii f. 1a-c, 2a-b, text-fig. 8a; *P. arietiformis compressa* p. 92 pl. xx f. 3a-b; *P. a. elegans* p. 93 pl. xx f. 5a-b pl. xxii f. 8 text-fig. 9c vars. nov.; *P. vokesi* sp. nov. p. 95 pl. xxi f. 1a-e, pl. xxii f. 9. Cretaceous Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1 1942.

Pictonia, T. SCHMID 356.

†*Poterioceras cranbournensis* sp. nov. Cranbourne series, Quebec, T. H. CLARK Trans. roy. Soc. Can. (3) 36 4 1942 pp. 22, 32 pl. i f. 24.—†*P. subellipticum* sp. nov. National stone quarry 2 m. N.-E. Louisville, Nebraska, Argentine member of the Wyandotte limestone, A. K. MILLER & A. G. UNKLESBAY Ann. Carnegie Mus. Pittsburgh 29 1942 p. 135 pl. ii f. 4, pl. iv f. 4.

†*Prohysterocheras gracile* "new name" [sp. nov.] (= *Prohysterocheras wordiei* var. *compressa* Spath 1922 p. 144 pro parte pl. iii f. 6 only) p. 127; *P. hankaense* sp. nov. p. 131 pl. xxxiii f. 3-5, pl. xxxiv f. 3-5, pl. xxxv f. 12a-c, 13, text-fig. 15 b-c; Cretaceous Ammonites from Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1 1943.

†*Promicroceras marstonense* Spath growth stages, graphs and tables, E. D. CURRIE 113.

†*Propinacoceras australe* spp. nov. Wandagu Hill; Permian Western Australia, C. TEICHERT J. Paleont. Menasha Wis. 16 2 1942 p. 224 pl. xxxv f. 2-7.

†*Proscaphites taurimontanus* sp. n. Schafgrabens, Athleta-zone, A. ERNI Mitt. naturf. Ges. Solothurn 10 1934 pp. 124, 139 f. 7a-b.

†*Protocycloceras kaikingense* sp. nov. Ordovician Japan, T. OBATA Abst. 66 J. Shanghai Sci. Inst. 9 1940 pp. 293-302, figs.

Pseudocoscoceras margotae "nov. sp." [nom. nud.], "Donetz Ridge," L. LUNGERSHAUSEN 239.

†*Pseudogastricoceras texanum* sp. nov. Acme member of the Blaine (Permian), Texas, R. L. CLIFTON J. Paleont. Menasha Wis. 16 1 1942 p. 697 pl. ciii f. 11, 12, pl. civ f. 1-6.—†*P. goochi* sp. nov. Permian, Western Australia, C. TEICHERT J. Paleont. Menasha Wis. 16 2 1942 p. 227 pl. xxxv f. 12-16.

Ptenoceratidae fam. nov. *Ptenoceras*, *Adelphoceras*, *Homoadelphoceras*, C. TEICHERT J. Roy. Soc. W. Austl. 25 1939 p. 108.

†*Ptychites kolymensis* sp. nov. Anisian Trias, Kolyma basin right bank of

Zyrianka River, Siberia, L. KIPARISOVA Trans. arctic Inst. Leningrad 91 1937 pp. 166, 235 pl. iv f. 3 holotype 4 text-fig. 31.

†*Ptychoceras fauncei* sp. nov. Cretaceous Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1 1943 p. 185 pl. xlv f. 2a-c text-figs. 27a-b.

†*Puzosia quenstedti angolana* var. nov. p. 149 pl. xxxvii f. 2-9 pl. xli f. 1-6 text-figs. 20a-g; *P. q. applanata* var. nov. p. 151 pl. xxxvii f. 10-11, pl. xli f. 7-8 text-figs. 20 h-j; *P. tenuis* sp. nov. p. 153 pl. xxxvii f. 12-13, pl. xxxviii f. 1-2, pl. xli f. 9-10 text-fig. 20k; *P. cuvervillei flexisulcata* p. 157 pl. xxxviii f. 7-10, pl. xxxix f. 2 text-figs. 21f-g, Cretaceous Ammonites from Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1 1943.

†*Rizoceras graciliforme* p. 21 pl. ii f. 7; *R. conicum* p. 21 pl. i f. 7-8; sp. nov. Cynthiana (Ordovician), Kentucky, R. H. FLOWER Bull. Amer. Paleont. Ithaca 27 103 1942.

†*Sharpeiceras goliath* sp. nov. North of Cabiri, Angola, O. HAAS Amer. Mus. Nov. 1182 1942 p. 7 figs. 5-7.

†*Stenopronorites*, L. S. LIBROVITCH 229.

†*Stereoplasmoceras iniquiseptatum* sp. nov. Devonian, near Oscar Homestead, S.-E. end of Oscar Range, Western Kimberley District, Western Australia, C. TEICHERT J. Roy. Soc. W. Austl. 25 1939 pl. 115 pl. i f. 6.

†*Striatoceras striatum* (type of *Striatoceras*) and *S. ? lineatum* type of *Greenlandoceras* belong to Actinoceratidae, T. OBATA 287.

†*Syngastricoceras* gen. nov. genotype *Gastricoceras orientale* Yin. Carboniferous, L. S. LIBROVITCH Trans. Arctic Inst. Leningrad 101 1938 pp. 81, 103.

†*Tetragonites jurinianus angolana* var. nov. Cretaceous Angola, O. HAAS Bull. Amer. Mus. Nat. Hist. 81 1 1943, p. 170 pl. xlv. f. 3, pl. xlv. 1a-b, text-figs. 25 a-b.

†*Texanites angolanus* forma typica sp. nov. p. 12 f. 8, 9, 10, north of Cabiri; *T. a. berryi* var. nov. p. 15

f. 11, exact locality unknown; Cretaceous Angola, O. HAAS Amer. Mus. Nov. 1182 1942.—†*T. quinquenodosus* (Redtenbacher) *evaluta* var. nov. Angola, exact locality unknown, O. HAAS Amer. Mus. Nov. 1182 1942 p. 18 f. 12.

†*Tragodesmoceras scotti* sp. nov. Eagle Ford formation [Cretaceous] Texas, W. L. MOREMAN J. Paleont. Menasha Wis. 16 2 1942 pp. 196, 208 pl. xxxiii f. 8 text-fig. 2d.

†*Uraloceras serpentinum* sp. nov. lower Permian, Urals, MAXIMOVA & RZHENCEV C.R. Acad. Sci. Moscou 28 2 1940 p. 161.

†*Wadeoceras* gen. nov. Archiacoceratidae fam. nov., type *W. australe* sp. nov. Middle Devonian Mt. Pierre, Western Kimberley District, Western Australia, C. TEICHERT J. Roy. Soc. W. Austl. 25 1939 p. 111 pl. i f. 2-3 text-fig. 1.

†*Worthoceras gibbosum* sp. nov. Eagle Ford formation [Cretaceous], Texas, W. L. MOREMAN J. Paleont. Menasha Wis. 16 2 1942 pp. 196, 215 pl. xxxiv f. 7-8 text-fig. 2q.

†*Yehlioceras* gen. nov. type *Suecoceras yehliense* Grab., T. OBATA Abst. 77 J. Shanghai Sci. Inst. 9 194 pp. 273-286.

ADDENDA & CORRIGENDA.

For *Slata* Zool. Rec. lxxvi (1939) page 88 read *Slala*.

For *Orpularca* Zool. Rec. lxxvi (1939) page 115 read *Opularca*.

For *Dentimodiolus* Zool. Rec. lxxvi (1939) page 116 read *Dentimodiolus*.

For *Tetanosarcolites* Zool. Rec. lxxvi page 130 read *Titanosarcolites*.

For *Dinocochlia* Zool. Rec. lxxvii (1940) page 68 read *Dinocochlea*.

10. CRUSTACEA

ARRANGED BY

W. L. SCLATER, M.A.

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Parthenope (Platylambrus) punctata sp. n. Florida W. coast, CHACE Proc. N. Engl. zool. Cl. 19 p. 85 figs.

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Geocarcinidae, Hapalocarcinidae.)

Cyclograpsus incisus **sp. n.** Chinese seas, SHEN J. Hong Kong Fish. Res. Sta. 1 no. 2 p. 255 figs.

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Haplocarcinus marsupialis habits, sexual and other, McNEILL 134.

Hyoplax ningpoensis **sp. n.** Chinese seas, SHEN J. Hong Kong Fish. Res. Sta. 1 no. 1 p. 255 figs.

Sesarma (*Parasesama*) *triptectinis* **sp. n.** Chinese seas, SHEN J. Hong Kong Fish. Res. Sta. 1 no. 2 p. 255 figs.

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Odontodactylus nigricaudatus **sp. n.** Gulf of Campechy, CHACE Proc. N. Engl. zool. Cl. 19 p. 88 figs.

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CORRECTIONS FROM PREVIOUS RECORDS.

For *Pseudostrepula* Opik Zool. Rec. 74 for 1937 Crust. p. 53, read *Pseudostrepula*.

For *Carboprimitia* Croneis & Funkhauser Zool. Rec. 76 for 1939 Crust. p. 47, read *Carboprimitia*.

SUPPLEMENT.

The names of the following genera have been overlooked in Neave's Nomenclator Zoologicus (1939-40) and other similar compilations, including the Zoological Record. They are here given for the benefit of systematic workers.

†*Adelocaris* **gen. n.** for type *A. peruviansis* **sp. n.**, PACKARD Proc. Boston Soc. N.H. 24 1890 p. 211. [Incert. fam. Macrura.]

Amphion **gen. n.** for type *A. reynaudi* **sp. n.**, A. MILNE-EDWARDS, Ann Soc. Ent. Fr. 1 pt. 4 1933 p. 336. [Nec Huebner 1819. Based on a *Phyllosoma* larva and the species not named, only mentioned as dedicated to "mon ami M. Reynaud.]

†*Anaglyptus* gen. n. for type *A. delfortrei* sp. n., A. MILNE-EDWARDS Actes Soc. Linn. Bordeaux 29 1873 p. lxxvi. [Nec *Anaglyptus* Mulsant 1839, Leucosiidae; not marked as gen. nov. by A. M.-Edw.]

†*Cyclocaris* gen. n. for genotype *Eryon propinquus*, SCHLOTH BEURLÉN Fortschr. Geol. Pal. Berlin 8 Hft. 26 1930 p. 372. [Nec *Cyclocaris* Stebbings 1888.]

Eteroranina sect. n. *Ranina* Raninidae for type *Ranina dentata* Latr., FABRIANI Atti Accad. Sci. Ven.-Trent.-Istr. (3) 3 1910 p. 88. [Raninidae.]

Faxonella subg. n. (of *Faxonius*) for type *Cambarus clypeatus*, HAY CREASER Occ. Pap. Mus. Zool. Univ. Mich. no. 275 1933 p. 21. [Nephropsidea.]

†*Gerastus* Kröyer MS. quoted by Rathbun N. Arch. Mus. Hist. Nat. Paris (4) 8 1906 p. 65 for *G. denticulatus* Kröyer MS. = *Trichodactylus dentatus* Randall. [Potamonidae. nec *Gerastos* Goldfuss 1843. Emend. *Gerastus* Agassiz 1846.]

Hombronia gen. n. for type *Hymenosoma tridentatum*, LUCAS in Hombron et Jaquinot Voyage au Pôle Sud. Zool. iii Crust. 1853 p. 62. [Hymenosomatidae.]

†*Knebelia* gen. nom. n. for *Münsteria*, KNEBEL nec STERNBERG C. R. Acad. Sci. Paris 175 1922 p. 983. [Eryonidea. Note *Münsteria* was applied by Sternberg to a fossil Fucoid, so Knebel's name is not invalid.]

†*Lecythocaris* gen. n. for type *Prosopeon paradoxum* v. Meyer 1858, H. v. MEYER Palaeontogr. 7 1860 p. 216. [Prosopeonidae, Dromiacea.]

†*Lissocardia* gen. n. for type *L. silesiaca* v. Meyer 1847, H. v. MEYER Palaeontogr. 1 1851 p. 254. [Erymaidae, Nephropsidea. The same name is given by Neave with reference Jahrb. Min. 1847 p. 575 and marked Mollusca.]

Lophopilumnus gen. n. for *Pilumnus dilatipes* Adams & White, MIERS Challenger Reports 17 no. 2 1886 p. 148 footnote.

†*Lophoranina* sect. n. *Ranina* Raninidae for *Ranina marestiana* Koenig, FABRIANI Atti Accad. Sci. Ven.-Trent.-Istr. (3) 3 1910 p. 88. [Raninidae.]

Lupocycloporus gen. n. for *Achelous whitei* M.-Edw. 1861, ALCOCK J. Asiat. Soc. Bengal 68 pt. 2 1899 p. 44. [Cyclometopa.]

†*Machaerophus* gen. n. for type *M. spectabilis* sp. n., v. D. MARCK Palaeontogr. Berlin 11 1863 p. 72. [Penaeidea.]

†*Martinocarcinus* gen. n. for genotype *M. ickeae* sp. n., BOEHM Samml. Geol. Reichsmus. Leiden n.s. 1 pt. 2 1922 p. 531. [Xanthidae.]

†*Mesocrangon* gen. n. for type *M. atra* sp. n., WOODWARD Geol. Mag. 10 1873 p. 523. [? Thalassinidea.]

†*Microcorystes* gen. n. for type *M. parvulus* [n. sp.], FRITCH Arch. Naturw. Landesdurchforsch. Böhmen 9 no. 1 1893 p. 105. [Dromiacea. Neither gen. or sp. marked as new.]

Miersia gen. n. CHUN Bibl. Zool. Cassel 1 Hft. 1 1888 p. 34 for type *M. clavigera* sp. n. [Nec *Miersia* Kingsley 1880; is a synonym of *Lysomata*—Caridea.]

†*Nodoprosopeon* gen. n. for genotype *Prosopeon ornatum* H. v. Meyer, BEURLÉN Palaeont. Zeitschr. Berlin 10 1928 p. 147. [Prosopeonidae.]

†*Palinuridia* gen. n. CARTER ex Lamplough MS. for type *P. scarburgensis* sp. n. nom. nud. Quart. J. Geol. Soc. 45 1889 p. 617. [Palinuridea.]

Phigaleia gen. n. RATHBUN ex White MSS. for type *Arica septemdentata* White 1847 N. Arch. Mus. Paris (4) 8 1906 p. 58. [Nomen nudum MSS. name of White in Bt. Mus. Potamonidae.]

Pterocaris gen. n., CLAUS Untersuchungen zur Erforschung der genealog. Grundl. des Crustaceen-System p. 65 pl. xii figs. 13–15 1876. [Founded on a larval Brachyuran incert. sed. no specific name. See also *Pterocaris* Heller 1862 in Neave.]

†*Plagiolophus* gen. n. for genotype *P. vancouverensis* sp. n., WOODWARD Quart. J. Geol. Soc. 52 1896. [Nec Bell 1857 or Pomel 1847. See *Archaeopus* Rathbun 1908. Cymopoliidae.]

†*Propagurites* subg. n. for type *Pagurites hungaricus* sp. n., LÓRENTHEY & BEURLÉN Geol. hungarica Ser. Palaeont. no. 3 1929 p. 72. [Paguridea.]

†*Protomunida* gen. n. for genotype *Munida munidoidea* Segerb 1900, BUELEN Fortschr. Geol. Palaeont. Berlin 8 Hft. 26 1920 pp. 344, 373. [Galatheidea.]

Pseudomicippe gen. n. for genotype *P. granulosa* sp. n., PELSENER ex Bosquet MS. Bull. Mus. roy. Hist. Nat. Belg. 4 1886 p. 170. [Calappidae; ? nec Heller 1861. See Neave.]

†*Pustulina* gen. n. for type *P. suevica* sp. n., QUENSTEDT Der Jura, Tubingen 1857 p. 807. [Paguridea ?]

†*Squamosoglyphea* subg. n. for subg. type *Glyphea udressieri* H. v. Meyer, BUELEN Fortschr. Geol. Pal. Berlin 8 Hft. 26 1930 p. 372. [Glyphaedae.]

†*Tuberculocarcinus* subg. n. for type *Titanocarcinus (Tuberculocarcinus) raulinianus* M.-Edw., LÓRENTHEY & BUELEN Geol. Hungarica ser. Paleont. 3 1929 p. 233.

†*Typilobus* gen. n. for type *T. granulatus* sp. n., STOLICZKA Palaeont. Indica ser. 7-24 vol. 1 pt. 1 1871 p. 14. [Leucosiidae.]

I have been unable to verify the following names in the originals owing to the disorganisation of the Libraries at the present time, but have given references to Glaessner's Catalogue (1929), where most of them will be found.

Aglauros gen. n. for type *A. effusa* sp. n., COSTA Rend. Accad. Pont. Napoli 2 1854 p. 10. [Nephropsidea, is a synonym of *Pseudastacus*. See Glaessner Foss. Cat. Crus. Decap. p. 351.]

†*Astyages* gen. n. for type *A. effusus* sp. n., COSTA Palaeont. Regno Napoli p. 3 in Atti Accad. Pont. Napoli 8 1864 p. 153. [Nephropsidea, now a synonym of *Pseudastacus*. See Glaessner Foss. Cat. Crust. Decapod. p. 352.]

†*Brachipus* also spelt *Branchipus* gen. n. for *B. gigas* sp. n., COSTA Nuove osserv. e scoperte int. ai foss. della Calc. ad Ittiol. di Pietraroia p. 7 1866. [See Glaessner Foss. Cat. Crust. Decapod. pp. 69 and 352, is a synonym of *Pseudastacus*.]

†*Coelopus* gen. n. for type *C. jolyi* sp. n., ETALLON Bull. Soc. d'Agric. Sci. Lettr. Haute-Saône 5 pt. 9 p. 148. [Homalodromiidae. See Glaessner Foss. Cat. Crust. Decapod. p. 122.]

†*Cancerites* gen. n. for type *C. molassicus* sp. n., QUENSTEDT Handb. Petrefaktenk. 2nd ed. 1867 p. 312. [Nr. *Cancer*. See Glaessner Foss. Cat. Crust. p. 109.]

†*Gastrodorus* gen. n. for type *G. neuhausensis*, H. v. MEYER N. Jahrb. Min. 1864 p. 20. [Homolidae. I have been unable to trace this reference as given by Glaessner Foss. Cat. Crust. Decap. p. 180.]

†*Goniochirus* gen. n. for *G. babeau* sp. n., ETALLON Bull. Soc. Agric. Sci. Lettr. Haute-Saône 9 1861 p. 45. [Paguridae. See Glaessner Foss. Cat. Crust. Decap. p. 200.]

†*Mesostylus* gen. n. for *Pagurus femjasi* Desmarest 1822, H. BROWN & F. ROEMER Lethaea geognostica 3rd ed. 52 pt. 5 1852 p. 354. [Callianassidae. See Glaessner Foss. Cat. Crust. Decap. p. 80.]

†*Orhomalus* gen. n. for type *O. virgulinus* sp. n., ETALLON Bull. Soc. Agric. Sci. Lettr. Haute-Saône 9 p. 141. [Paguridae. See Glaessner Foss. Cat. Crust. Decap. p. 281.]

†*Palaeodromites* gen. n. for type *P. octodentatus* sp. n., A. MILNE-EDWARDS Bull. Soc. Sci. Hist. Nat. Yonne (5) 19 1865 p. 345. [Dynomenidae, Dromiacea. See Glaessner Foss. Cat. Crust. Decap. p. 295.]

†*Phalangites* gen. n. for type *P. priscum* sp. n., MÜNSTER Beitr. Z. Petrefact. 1 1839 p. 84. [Palinuridae, apparently a larva of *Palinurina*. See Glaessner Foss. Cat. Crust. p. 314 footnote. This is quoted by Neave and marked Arach.]

†*Pseudorarinella* gen. n. ? Beurlen [Mentioned by Beurlen Fortschr. Geol. Palaeont. 8 1930 pp. 363, 376.]

†*Stenodromia* gen. n. for type *S. gibbosa* sp. n., A. MILNE-EDWARDS C. R. Trav. Congr. sci. France 59 e session à

Pau 1873 p. 8. [Calappidae. See Glaessner Foss. Cat. Crust. Decap. p. 380.]

†*Symnistra* **gen. n.** for type *S. uraucana* **sp. n.**, PHILIPPI Die tert. u. quart. Versteinerungen Chiles 1887 p. 22. [Raninidae. See Glaessner Cat. Crust. Decapod. p. 381; but see also Neave p. 361 when quoted as of Rafinesque 1815.]

†*Thelecarcinus* **gen. n.** for type *T. gümbeli* **sp. n.**, BÖHM Palaeontogr. 38

1891 p. 43. [Xanthidae. See Glaessner Foss. Cat. Crust. Decap. p. 384.]

†*Trichyurus* **gen. n.** for type *T. monticellianus* **sp. n.**, COSTA Atti R. Accad. Sci. Napoli 2 1865 p. 30. [Nephropsidae. See Glaessner Foss. Cat. Crust. Decapod. p. 352.]

†*Udorella* **gen. n.** for type *U. agassizi* **sp. n.**, OPPEL Palaeont. Mitt. Mus. bayer. Staates 1 1862 p. 104. [Udorellidae, Caridea. See Glaessner Foss. Cat. Crust. Decap. p. 391.]

II. TRILOBITA.

ARRANGED BY

C. J. STUBBLEFIELD, D.Sc.

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4.—**Duarte, A.** Fosséis Carboníferos do Rio Jatapú. Bol. Minis. Agric. Serv. Geol. Mineral. Brasil, Rio de Janeiro **74** 1938 pp. 1-18 pls. i-iii (Spanish text).

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Dalmanites diagnosis, distribution and discussion of genus p. 35, *D. hintonensis* p. 42 pl. iii figs. 26, 28, *D. lingulifer* p. 45 pl. iii figs. 29, 30, *D. taffi* p. 50 pl. iii fig. 27 **spp. n.** Devonian U.S.A. (Oklahoma) ULRICH & DELO in DELO; *D. bassleri* p. 37 pl. iii figs. 10, 11, *D. howelli* p. 47 pl. iii figs. 12, 13 Silurian U.S.A. (Arkansas), *D. longispinus* p. 46 pl. iii fig. 32 Silurian U.S.A. (Maine), *D. litchfieldensis* p. 46 pl. v fig. 14 Devonian U.S.A. (New York), *D. mississippiensis* p. 47 pl. iii fig. 31 Devonian U.S.A. (Mississippi), *D. stewartiae* for *D. cf. aspinosus* Stewart 1923 p. 49 pl. iii figs. 19, 20 Devonian U.S.A. (Missouri) **spp. n.**, *D. aspinosus* p. 36 pl. iii fig. 18, *D. bicornis* p. 37 pl. iii fig. 16, *D. bisignatus* p. 38 pl. iii figs. 22, 23, *D. brevicaudatus* p. 38 pl. v fig. 4, *D. brevigladiolus* p. 39 pl. iv figs. 11, 12, *D. carlhwegi* p. 39 pl. iii fig. 34, *D. caudatus jupiterensis* p. 40 pl. iv fig. 6, *D. coxius* p. 40 pl. iv fig. 25, *D. danae* p. 40 pl. iii figs. 24, 25, *D. gaveyi* p. 41 pl. iv fig. 24, *D. halli* p. 41 pl. iii figs. 6-9, *D. illinoisensis* p. 43 pl. iv fig. 15, *D. ? latus* p. 43 pl. iv fig. 16, *D. limulurus* p. 43 pl. iii fig. 1, *D. limulurus lunatus* p. 44 pl. iii fig. 2, *D. platycaudatus* p. 48 pl. iii figs. 14, 15, *D. praenuntia* p. 48 pl. iii fig. 17, *D. retusus* p. 49 pl. iii fig. 21, *D. sloco* p. 49 pl. iii fig. 33, *D. ?*

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Dalmanitidae (Asteropyginae) subfamily diagnosis distribution and discussion p. 86, comprising *Asteropyge* Hawle & Corda, *Metacanthus* Hawle & Corda, *Cryphina* Oehlert, *Kayserops*, *Greenops*, *Hadrorakos* *Cryphaeoides* Delo, *Comura* R. & E. Richter p. 8; *D.* (Dalmanitinae) subfamily diagnosis distribution and discussion p. 35, comprising *Dalmanites* Barrande, *Dalmanitina* Reed, *Odontochile* Hawle & Corda, *Helioccephalus*, *Eudolatites* Delo p. 8; *D.* (Pterygomelopinae) subfamily diagnosis, distribution and discussion p. 90, subfamily comprising *Pterygomelopus*, *Chasmops*, *Monorachus* Schmidt, *Calyptaulax* Cooper, *Eomonorachus*, *Achatella*, *Calliops* Delo p. 9, *Ligometopus* **gen. n.** p. 109; oldest known species *Calyptaulax* ? *nicholsoni* Salter of Skiddaw Slates of Britain p. 12; *D.* (Synphorinae) subfamily comprising *Synphoria* Clarke, *Probolium* Oehlert *Corycephalus* Hall & Clarke, *Odontoccephalus* Conrad, *Coronura* Hall & Clarke, *Malladaia* Oehlert; *Anchiopsis*, *Dalmanitoides*, *Trypaulites* Delo 1935 and *Synphoroides* **gen. n.** p. 8, DELO Spec. Papers Geol. Soc. Amer. 29 1940.

Dalmanitina diagnosis, distribution and discussion of genus p. 53; *D. weaveri* (Salter) confirmed as a British species occurring in Silurian of Canada (Nova Scotia) p. 53 pl. iv figs. 7-10; *D. arkansana* p. 54 pl. iv figs. 1, 2, DELO 3.

Dicelloccephalus several forms referred to *Briscoia* [quod vide], *D. pepinensis* [partim] & *D. minnesotensis* [partim] Winchell 1864 to *Prosaugia barabuenensis* p. 43, *D. tribulis* Walcott 1912 to *P. tribulis* p. 44, *D. hartti* Walcott 1912 partim to *Saukia eboracensis* p. 49, RESSER 24.

Dicranopeltoides ? *logani* **sp. n.** for *Brontes* ? *canadensis* Logan 1846 partim (pygidium) p. 237 original figure (composite) copied and syntype refigured pl. xxvi figs. 6, 7; *D.* ? *canadensis* restricted to *B.* ? *canadensis* Logan 1846 partim (cephalon) p. 235 original figure (composite) copied, topotypes figured pl. xxvi figs. 1-5 Silurian Canada (Quebec), NORTHROP Spec. Papers Geol. Soc. Amer. 21 1939.

Dictyella manchurica revised generic reference for *Hysterolenus* ? *manchuricus* Kobayashi 1933 p. 15, RESSER 24.

Dikelocephalus ? *limbatus* Walcott 1914 partim (i.e. pl. lxxv fig. 8) referred to *Briscoia winchelli* p. 10; *D. barabuenensis* Whitfield 1878 to *Platycolpus whitfieldi* p. 40, *D. newtonensis* Weller 1903 to *Prosaugia* p. 43, *D.* ? *tribulis* Walcott 1914 to *Prosaugia* p. 44, RESSER 24.

Ditomopyge postcarbonarius interpretation of Gemmellaro's original figures of *Proetus postcarbonarius* revised so that the thorax may consist of 9 (not 10) segments and the cephalon may have a normal occipital ring, p. 487 text-figs 1-4, 6, WEBER 34.—*D.* discussed p. 650, REED 22. See also *Cyphinium*.

Dolichometopus deois Walcott 1913 partim renamed *Amphoton blackwelderi* **sp. n.**, *D. deois* Sun 1924 renamed *A. kaipingense* **sp. n.**; *D. alceste* Walcott 1905, *D. hyrie* Walcott 1906 both referred to *Amphoton* p. 5, RESSER 24.

Dorypyge genus discussed on the basis of examination of genotype *D. richthofeni* Dames p. 16, *D. lorenzi* **sp. n.** for *Olenoides* (D.) *richthofeni* Lorenz 1906 non Dames p. 18, *D. suni* **sp. n.** for *D. richthofeni* Walcott 1913 pl. viii figs. 1, 1e only; *D. shantungensis* **sp. n.** for *D. richthofeni* Walcott 1913 pl. viii figs. 1a-1d, 1f; *D. chihliensis* **sp. n.** for *D. richthofeni* Sun 1924; p. 19; *D. laevis* Walcott raised from subspecific to specific rank p. 17 Cambrian China; *D. slatkowskii* von Toll referred to *Kootenia* p. 27; *D. reticulata*, *D. lakei* Cobbold referred to *Kootenia* p. 27; *D. quadriceps valida* Matthew to *Kootenia* p. 28, *D. horrida* p. 36, *D. acadicus* p. 37 Matthew to *Olenoides*, *D. damia* Walcott 1917 to *Olenoides* p. 34, RESSER Smithsonian. misc. Coll. 101 15 1942.—*D. moori* **sp. nondesc.** recorded from Anabar (Siberia) p. 14 [47] LER-MONTOVA in VOLOGDIN 33.

Ectenonotus Raymond 1920 defined and discussed, *E. raymondi* **sp. n.**, Newfoundland for *E. westoni* Raymond non Billings p. 476 pl. lxxiv fig. 4; *E. marginatus* **sp. n.** U.S.A. (Nevada) p. 476 pl. lxxviii fig. 3 pl. lxxiv figs. 1, 2, *E. connemarius* (Reed 1909) p. 476 pl. lxxviii figs. 1, 2, pl. lxxiv figs. 8-10, Eire and U.S.A. (Nevada) Ordovician, HOLLIDAY J. Paleont. Menasha, Wis. 16 4 1942.

Ekmania rogersi Howell and Mason 1938 referred to *Braintreëlla* p. 568, WHEELER 37.

Embolimus spinosa Rominger 1887 renamed *Zacanthoides romingeri* p. 56, RESSER 24.

Emmrichella nodosa revised generic reference for *Solenopleura nodosa* Sun 1924 p. 21, RESSER 24.

Encrinuridae see Cybelidae.

Encrinurus caplanensis sp. n. p. 239, pl. xxvi figs. 13-15, *E. cf. caplanensis* p. 240 pl. xxvi figs. 16, 17, *E. cf. reflexus* Raymond p. 240, Silurian (Canada) (Quebec) NORTHROP Spec. Papers Geol. Soc. Amer. 21 1939.—*E. ornatus* range in Clinton group p. 41, GILLETTE 6.

Entomolithus (*Oniscites*) *derbiensis* Martin referred to *Cummingella* gen. n. p. 653, REED 22.

Eoagnostus primigenus revised generic reference for *Archaeagnostus primigenus* Kobayashi, p. 21, RESSER 24.

Eocyphinium gen. n. [near *Cyphinium*] for type *E. clitheroense* sp. n. Carboniferous Britain (N. England) pp. 652, 656 pl. ix, figs. 1, 1a; *E. spinosus* p. 659, *E. ? bivium* sp. n. Carboniferous Britain (Scotland) p. 659 pl. ix figs. 2, 2a, 2b, REED Ann. Mag. nat. Hist. [11] 9 1942.

Eomonorachus diagnosis, distribution and discussion of genus p. 107, *E. convexus* sp. n. Ordovician U.S.A. (New York) p. 108 pl. xiii fig. 9, ULRICH & DELO in DELO, *E. intermedius* p. 107 pl. xiii figs. 7, 8, DELO Spec. Papers Geol. Soc. Amer. 29 1940.

Eophacops diagnosis, distribution and discussion of genus p. 25, *E. cerviculata*, sp. n. Silurian U.S.A. (Tennessee) p. 26 pl. ii fig. 9, ULRICH & DELO in DELO, *E. matheri* sp. n. for *Phacops cf. pulchellus* Kindle & Breger 1904 Silurian U.S.A. (Indiana) p. 27 pl. ii figs. 7, 8, *E. handwerki* p. 26 pl. ii figs. 1-4, *E. mancus* revised generic reference for *Phacops* (*Portlockia*) *m.* Foerste 1919, p. 27 pl. ii fig. 6, *E. marklandensis* for *Ph. (Po.) m.* McLearn 1918, p. 28 pl. ii fig. 5, *E. primaevus* for *Ph. p.* Clarke 1908, p. 28 pl. ii figs. 11-13, *E. ? pulchellus* for *Ph. p.* Foerste 1887, p. 29 pl. ii fig. 10, DELO Spec. Papers Geol. Soc. Amer. 29 1940.—*E. orestes* p. 245 pl. xxvi fig. 12, NORTHROP 16.

Eteraspis range extended from Nevada, now considered good guide fossil for Middle Cambrian p. 22; *E. glabra* revised generic reference for *Asaphiscus* (*Blainia*) *glabra* Walcott 1916, *E. paula* for *A. (B.) p.* Walcott 1916, *E. crassa* for *Bountia crassa* Resser 1938, p. 22, RESSER 24.

Euloma monile praemonile, *E. m. monile*, completion of description p. 307, *E. sp.* Tremadoc Britain (Warwickshire) p. 307 pl. xlv fig. 1, LAKE, Monograph of the British Cambrian Trilobites Paleont. Soc. London 1942.

Euptychaspis minuta revised generic reference for *Ptychaspis minuta* Whitfield 1878, p. 22, RESSER 24.

Eymekops maia revised generic reference for *Ptychoparia ? maia* Walcott 1906; *E. irma* for *Anomocarella irma* Walcott 1906, p. 23, RESSER 24.

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Gravicalymene originally described by Shirley 1936 as a subgenus of *Calymene*, raised to generic rank; *G. angustior* cited from type area of Yeringian Beds in Victoria, *G. cootamundrensis* from N.S.W., *G. maloungaensis* from Indo-China p. 45, GILL Proc. roy. Soc. Viet. N.S. 54 1942.

Greenops, diagnosis, distribution and discussion of genus p. 87, *G. kindlei* sp. n. Devonian U.S.A. (Indiana) p. 89 pl. x figs. 22, 23 [on Explanation of Plates stated to be ULRICH & DELO sp. n. in text to be DELO], *G. barrisi* p. 87 pl. x fig. 18, *G. boothi* p. 88 pl. x figs. 14, 15, 17, *G. b. calliteles* p. 88 pl. x figs. 13, 16, 19, *G. comis* p. 89 pl. x fig. 21, *G. pleione* p. 90 pl. x fig. 20 DELO Spec. Papers Geol. Soc. Amer. 29 1940.

Griffithides defined, discussed and compared with related genera p. 649; *G. ? ambiguus* sp. n. Carboniferous Britain (Isle of Man) p. 667 pl. xi figs. 6, 6a, 6b; *G. spinosus* Weber referred to *Eocyphinium* gen. n. p. 659, *G. shunnerensis* King referred to *Weberides* gen. n. p. 665 footnote, *G. carringtonensis* Etheridge to *Cummingella* gen. n. ? p. 670, REED Ann. Mag. nat. Hist. [11] 9 1942.—*G. (Pseudophillipsia) postcar-*

bonarius revised generic allocation of *Proetus postcarbonarius* (*quod vide*) p. 486, WEBER 34.

Haniwa suni revised generic reference for *Ptychaspis suni* Kobayashi 1931 p. 23, RESSER 24.

Hausmannia Hall & Clarke considered a synonym of *Odontochile* Hawle & Corda p. 54, DELO 3.

Heliocephalus considered a local branch from main stem of dalmanitid evolution with no real phyletic significance p. 13, DELO 3.

Homalonotus delphinocephalus, range in Malin group p. 41, GILLETTE 6.

Hysterolenus? *manchuricus* Kobayashi 1933 referred to *Dictyella* p. 15, RESSER 24.

Iddingsia affinis (Walcott 1884) Resser 1937 referred to *Berkeia* p. 7, RESSER 24.

Idiomeres disparilis revised generic reference for *Agnostus disparilis* Hall 1863 p. 23, RESSER 24.

Iliaenus cf. *grandis* p. 230, *I. cuniculus* Hall referred to *Bumastus* p. 229, *I. insignis* Hall to *B.*, *I. ioxus* Hall to *B.* p. 230, NORTHROP 16. — *Iliaenus*? *inflatus*, new generic designation for *Psilocephalus inflatus* Salter, redescribed & type refigured p. 318 pl. xlv figs. 10–13, *I. oriens* Moberg & Segerberg p. 317, LAKE 14.

Inouyia titiana Walcott 1913 referred to *Inouyops*, *I.*? *inflata* Walcott 1913 to *Inouyops* p. 25, RESSER 24.

Inouyops gen. n. [near *Lorenzella*] for type *Ptychoparia titiana* Walcott 1905 Cambrian China (Shantung) p. 25, *I. inflata* (Walcott 1905) p. 25, RESSER Smithson. misc. coll. 101 15 1942.

Isotelus maximus described from Ohio Ordovician with darkening of the test in parts of the cephalon, thorax and pygidium interpreted as traces of a simple original colour pattern, p. 710 pl. i figs. 1, 2, WELLS 35.

Kaniniella? *walcotti* Kobayashi 1938 referred to *Plethopeltis* p. 41, RESSER 24.

Kaolishania hopeiensis sp. n. for *K. pustulosa* Sun 1935 non Sun 1924 Cambrian China (Hopei) p. 25, RESSER Smithson. misc. coll. 101 15 1942.

Kingstonia thea revised generic reference for *Agraulos*? *thea* Walcott

1890, *K. seelyi* for *Pagodia seelyi* Walcott 1912 p. 26, RESSER 24.

Komaspidella Kobayashi 1938 considered synonym of *Kingstonia* Walcott 1924 p. 26, RESSER Smithson. misc. coll. 101 15 1942.

Kootenia burgessensis sp. n. for *K. dawsoni* Walcott 1918 non 1888, Cambrian, Canada (B.C.) p. 27; *K. slatkowskii* revised generic reference for *Proetus* (*Phaeton*) s. Schmidt 1886; *K. reticulata* for *Dorypyge* r. Cobbold, *K. lakei* for *D. lakei* Cobbold p. 27, *K. valida* for *D. quadriceps valida* Matthew p. 28, RESSER Smithson. misc. Coll. 101 15 1942.

Levisia adastria Walcott 1913 referred to *Taitzia* p. 53, RESSER 24.

Lichas boltoni, range in Clinton group, p. 41, GILLETTE 6. — *L. canadensis* Logan 1863 referred to *Dicranopeltoides*? and divided into two species p. 236, *L. canadensis* Billings 1866 renamed *Amphilichas*? *anticostiensis* p. 238, NORTHROP Spec. Papers Geol. Soc. Amer. 21 1939.

Ligometopus gen. n. [Dalmanitidae (Pterygomelopinae)] for type *L. typus* sp. n. Ordovician U.S.A. (Virginia) p. 109 pl. xiii figs. 10, 11, ULRICH & DELO in DELO Spec. Papers Geol. Soc. Amer. 29 1940.

Liocalymene clintoni, range in Clinton group p. 41, GILLETTE 6.

Lioparia burea revised generic reference for *Ptychoparia* (*Proampyx*) *burea* Walcott 1905 p. 28, *L. blautoeides* Lorenz 1906 referred to *Psilaspis* p. 45, *L. expansus* Kobayashi 1935 to *Psilaspis* p. 47, RESSER 24.

Lioparella Kobayashi 1937 referred to synonymy to *Psilaspis* Resser & Endo 1935 p. 44, *L. walcotti* Kobayashi 1937 transferred to *Psilaspis* p. 46, *L. expansa* Kobayashi 1937 to *Psilaspis* p. 47, RESSER 24.

Liostracus talingensis Dames 1883 referred to *Peishania* p. 38, *L. latus* Lorenz 1906 to *Psilaspis alcinoe* p. 44, RESSER 24.

Lisania? *tellus* revised generic reference for *Ptychoparia tellus* Walcott 1905, p. 28, *L. rectangularis* Sun 1924 referred to *Proasaphiscus* p. 42, RESSER 24.

Lloydia seelyi Raymond 1924 *partim* referred to *Kingstonia* p. 26, RESSER 24.

Lonchocephalus tellus Walcott 1913 referred to *Lisania*? p. 28, *L. calceiferus* Walcott 1912 *partim* to *Saukia eboracensis* p. 49, RESSER 24.

Lorenza inflata Kobayashi 1935 referred to *Inouyops* p. 25, RESSER 24.

Manchuriella yenchouensis sp. n. for *Ptychoparia impar* var.? Walcott 1913, *M. shantungensis* sp. n. for *Anomocare minus* Walcott 1913 *partim* (i.e. pl. xix fig. 1) Cambrian China p. 29, *M. yohi* revised generic reference for *Ptychoparia yohi* Sun 1924, *M.*? *leichuangensis* for *P. l.* Sun 1924 p. 28; *M. impar* for *P. impar* Walcott 1905, *M. gerardi* for *Conocephalina gerardi* Sun 1924 p. 29; *M. mina* Resser and Endo 1937 *partim* (pl. xxxvi fig. 2) referred to *M. shantungensis* p. 29, RESSER Smithson. misc. Coll. 101 15 1942.

Mansuyia discussion of genus and genotype p. 29, genotype interpreted as *M. orientalis* Sun 1924, cotypes taken as Sun 1924 pl. iii figs. 7i, 7j; *M. endoi* sp. n. for *M. orientalis* Sun 1924 *partim* (i.e. pl. iii figs. 7a-7d) Cambrian China (Shantung) p. 31; *M. orientalis* Sun 1935 pl. ii figs. 20-24 referred to *Paramansuyia taianensis* p. 38, RESSER Smithson. misc. Coll. 101 15 1942.

Marjumiella callas Walcott 1916 referred to *Perioura* p. 38, RESSER 24.

Maryvillia genus discussed p. 31, genotype species *M. arion* Walcott restricted to cranidium figured Walcott 1916 pl. lxiv figs. 4, 4b and pygidium formerly referred to *Blountia alethes* Walcott 1916 pl. lxiv figs. 1b, 1c; *M. ariston* Walcott likewise restricted to figured cranidia (Walcott 1916 pl. lxiv fig. 5) and pygidium formerly referred to *Asaphiscus*?, *M. masadensis* Resser 1938 also restricted p. 33, *M. georgica* Resser 1938 restricted p. 34; pygidia previously referred to *Maryvillia* now referred to *Bountia* [which see], RESSER Smithson. misc. Coll. 101 15 1942.

Mcnairia Deiss 1939 referred to synonymy to *Perioura* Resser 1938, *M. ornata* Deiss referred to *P.* p. 38, RESSER 24.

Megalophthalmus shansiensis sp. n. for *Anomocare megalurus* Walcott 1913

partim (i.e. pl. xviii figs. 9-9d) Cambrian China p. 34, RESSER Smithson. misc. Coll. 101 15 1942.

Menocephalites Kobayashi 1935 considered synonym of *Taitzia* Resser and Endo 1935 p. 53 thus *M. abderus*, *M. acanthus*, *M. acerius*, *M. acidalia*, *M. acis*, *M. admata*, *M. agave*, Walcott all referred to *Taitzia* p. 53, RESSER 24.

Menocephalus adrastia Walcott 1905 referred to *Taitzia* p. 53, RESSER 24.

Mesocrepecephalus Kobayashi 1935 considered synonym of *Crepicephalina* Resser & Endo 1935, p. 14, RESSER 24.

Metagraulos vicina and *M. abrota* Kobayashi 1935 referred to *Yabeia* p. 55, *M. nanum* Kobayashi 1937 to *Yabeia* p. 56, RESSER 24.

Microdiscus orientalis Walcott 1905 referred to *Pagetia* p. 37, *Microdiscus*? sp. undet. Weller 1903 referred to *Phylacterus welleri* (Raymond) p. 39, RESSER 24.

Neogriffithides guide fossil of Caraimian (Lower Permian) developed in Martian horizon (uppermost lower Permian) of Crimea p. 262, TUMANSKAYA 31.

Neolenus Matthew considered synonym of *Olenoides* Meek p. 152 KOBAYASHI Z.R., 1935, 234 [omitted]; *N. constans* Walcott 1917 referred to *Olenoides*, *N. superbus* Walcott 1908 referred to species of *O.* pp. 34, 36, *N. intermedius*, *N. intermedius pugio* Walcott 1908 referred to species of *O.* pp. 35, 36, RESSER 24.

Nileus discussed p. 309, *N. breviceps* p. 310, LAKE 14.

Niobe genus discussed and defined p. 326; Reed's genus *Niobella* considered to be a subgenus of *Niobe*, *N. insignis* text-fig. 6b, *N. emarginula* text-fig. 6c, *N. frontalis* text-fig. 6d, p. 330; all above figures of hypostomes, *N. (Niobella) homfrayi* p. 330 pl. xlvi figs. 4-7, *N. (N.) homfrayi smithi* pl. xlvi figs. 2-3, LAKE 14—*N.*? *feitleri* sp. n. Ordovician U.S.A. (Nevada) p. 473 pl. lxxiv fig. 7, HOLLIDAY J. Paleont. Menasha, Wis. 16 4 1942.

Niobella Reed accepted only as subgenus of *Niobe* p. 329, *N. aurora* text-fig. 6a p. 330, LAKE 14.

Odontocephalus diagnosis distribution and discussion of genus p. 73, *O. aegeria* p. 74 pl. viii figs. 10-12, *O. selenurus* p. 74 pl. viii figs. 13-17, *O. bifidus* p. 75 pl. viii figs. 18, 19, *O. coronatus* p. 76 pl. viii fig. 20, DELO 3.

Odontochile diagnosis, distribution and discussion of genus p. 54, *O. acuminatus* p. 55 pl. v figs. 9, 10 Devonian U.S.A. (Mississippi) ULRICH & DELO in DELO, *O. dunbari* for *Dalmanites* sp. Stewart 1923 p. 56 pl. v fig. 7 U.S.A. (Missouri), *O. lindennensis* p. 56 pl. iv fig. 26 U.S.A. (Tennessee), *O. ulrichi* p. 61 pl. vi figs. 5, 6 U.S.A. (Nevada) spp. n., *O. micrurus clarkei* var. n. for *Dalmanites micrurus* Clarke 1908 non (Green 1832) p. 59 pl. v fig. 3, *O. phacotypx gaspensis* var. n. for *D. phacotypx* Clarke 1908 non Hall & Clarke 1888 p. 61 pl. v fig. 11 Canada (Quebec); the following are apparently revised generic references of species of *Dalmanites*:—*O. berkleyensis* p. 55 pl. v fig. 12, *O. ? emarginatus* p. 56 pl. iv fig. 23, *O. keyserensis* p. 57 pl. iv figs. 17-19, *O. micrurus* photograph of type p. 58 pl. v figs. 1, 2, *O. percieus* p. 59 pl. v figs. 5, 6 pl. vi fig. 7, *O. phacotypx* p. 60 pl. iv fig. 21, *O. ploratus* p. 61 pl. v fig. 8, *O. prattini* p. 62 pl. vi figs. 2-4, *O. purduei* p. 62 pl. vi fig. 1, *O. townsendae*, p. 63 pl. iv fig. 20 Devonian DELO Spec. Papers Geol. Soc. Amer. 29 1940.

Olenoides marjumensis sp. n. for *Neolenus intermedius* Walcott 1908 partim (i.e. pl. vi figs. 4, 5) p. 35, *O. housensis* sp. n. for *N. superbus* Walcott 1908 partim (i.e. pl. iv fig. 4), *O. decorus* sp. n. for *N. intermedius* Walcott 1908 partim (i.e. pl. vi fig. 6) p. 36 Cambrian U.S.A., *O. constans* revised generic reference for *N. constans* Walcott 1917, *O. damia* for *Dorypygia* [error pro *Dorypyge*] *damia* Walcott 1917, *O. superbus* for *N. superbus* Walcott 1908 partim, p. 34, *O. intermedius* for *N. intermedius* Walcott 1908 partim, *O. pugio* for *N. intermedius pugio* Walcott 1908 partim p. 35, *O. horridus* for *Dorypyge horrida* Matthe 1897, p. 36, *O. acadicus* for *D. wasatchensis acadica* Matthew 1897 p. 37; *O. spinosus* Walcott 1886 partim to *Clavaspidella piochensis* p. 13, RESSER Smithson. misc. coll. 101 15 1942.—*O. schucherti*, p. 638 pl. i figs. 20-24, *O. gaspensis*

p. 638 pl. i figs. 18, 19 spp. n. Cambrian Canada (Quebec) KINDLE Amer. J. Sci. New Haven 240 9 1942.

Ormathops Delo referred with reserve to *Acastinae* p. 8, migration and obsolescence of eyes discussed; genus thought to have become extinct without giving rise to later *Phacopidacea* p. 12, DELO 3.

Oryctocephalus near *O. reynoldsi* recorded from Anabar (Siberia) p. 14 [47 English text], LERMONTOVA in VOLOGDIN 33.

Orygmaspis weedi sp. n. for *Ptychoparia* ? sp. undet. Walcott 1899 (pl. lxvi fig. 3) p. 37, Cambrian U.S.A. (Montana), RESSER Smithson. misc. Coll. 101 15 1942.

Pagetia orientalis revised generic reference of *Microdiscus o.* Walcott 1905, p. 37, RESSER 24.—*P. ferox* sp. nondesc. related to *P. buotes* Walcott [? error pro *buotes*] recorded from Siberia (Anabar) p. 14 [47], LERMONTOVA in VOLOGDIN 33.

Pagodia monkei referred to *Chuangia* p. 12, *P. thea*, *P. seelyi* to *Kingstonia* p. 26, RESSER 24.

Paramansuyella taianensis sp. n. for *Mansuyia orientalis* Sun 1935 non 1924 Cambrian China p. 38, RESSER Smithson. misc. Coll. 101 15 1942.

Paraphillipsia guide fossil of Caraimian (Lower Permian), developed "in mass" in Burnian horizon of Crimea p. 262, TUMANSKAYA 31.

Parapilekia Kobayashi 1934 genotype designated here *Calymene ? speciosa* Dalman 1827, genus emended, defined and discussed p. 475, *P. beattyana* sp. n. Ordovician U.S.A. (Nevada) p. 475 pl. lxxiii fig. 4, pl. lxxiv fig. 3, HOLLIDAY J. Paleont. Menasha, Wis. 15 4 1942.

Peishania talignenses [sic] revised generic reference for *Liostracus talignensis* [sic] Dames 1883 p. 38, RESSER 24.

Periomma cloudi sp. n. Cambrian Canada (Quebec) p. 638 pl. ii fig. 1-3, KINDLE Amer. J. Sci. New Haven 240 9 1942.

Perioura now recognized in Cordilleran region of U.S.A. as well as Appalachians, *P. inornata* revised generic reference for *McNairia i.* Deiss 1939, *P. callas* for *Marjumiya c.* Walcott 1916, RESSER 24.

Phacopidacea diagnosis p. 14, DELO 3.

Phacopidae diagnosis p. 14 constituted of subfamilies Phacopinae, Phacopidellinae Acastinae, and Calmoniinae, diagnosis given p. 7, *P.* (Phacopinae) constitution and distribution discussed p. 15; *P.* (Acastinae) constitution and distribution discussed p. 29, DELO 3.

Phacopidella ? *trisulcata* p. 245, NORTROP 16.—*P. chapmani* Williams & Breger 1916 referred to *Phacopina* p. 31, DELO 3.

Phacopina, diagnosis, distribution and discussion of genus p. 31, *P. anceps* p. 31 pl. ii figs. 24, 25, *P. chapmani*, Williams & Breger type refigured p. 31 pl. v fig. 13, *P. ? correlator* p. 32 pl. ii figs. 27–29, *P. nylanderii* p. 33 pl. ii fig. 26, DELO 3.

Phacops generic diagnosed, distribution and discussion p. 15; *P. logani birdsongensis* var. n. Devonian U.S.A. (Tennessee) p. 19 pl. i figs. 13–15; *P. llanvirensis* [error pro *llanvirnensis*] Hicks 1875 considered to be allied to *Ormathops*, *P. nicholsoni* Slater [error pro Salter] 1866 referred to *Calyptaulax* ? p. 12; *P. bufo* (Green) considered invalid because holotype poorly preserved and exact horizon and locality unknown p. 15; *P. cacopona* Hall 1861 considered invalid p. 16; *P. cristata* p. 16 pl. i figs. 4, 5; *P. cristata pipa* p. 17 pl. i figs. 6, 7; *P. hudsoniscus* p. 17 pl. i fig. 16; *P. iowensis* p. 18 pl. i figs. 18, 19; *P. logani* p. 19 pl. i figs. 8, 9; *P. logani gaspensis* p. 20 pl. i figs. 10–12; *P. nupera* p. 21 pl. i fig. 17; *P. orestes* p. 21 pl. i figs. 22–25, *P. rana* p. 22 pl. i figs. 1, 2, *P. rana milleri* p. 23, pl. i fig. 3, *P. raymondi* p. 24 pl. i figs. 20, 21, *P. cf. pulchellus* Kindle & Breger 1904 renamed *Eophacops matheri* p. 27, *P.* (*Portlockia*) *mancus* Foerste 1919 referred to *Eophacops* p. 27, *P.* (*Po.*) *marklandensis* McLearn 1918 to *E.* p. 28, *P. primaevus* Clarke 1908 to *E.* p. 28, *P. pulchellus* Foerste 1887 to *E.* ? p. 29 *P. anceps* Clarke 1890 to *Phacopina* p. 31, *P. correlator* Clarke 1900 to *Phacopina* ? p. 32, *P. weaveri* Salter 1865 to *Dalmanitina* p. 53, *P. callicephalus* Hall 1847 to *Calliops* p. 94, DELO Spec. Papers Geol. Soc. Amer. 29 1940.—*P. ?* described p. 245 Silurian Canada (Quebec) *P. trisulcatus* Hall 1852 referred with reserve to *Phacopidella* p. 245, NORTROP Spec. Papers Geol.

Soc. Amer. 21 1939.—*P. rana* p. 558 pl. lxxxi figs. 47, 48, pl. lxxxiv fig. 57, STUMM 30.—*P. trisulcata*, range in Clinton group p. 41, GILLETTE 6.—*P. fecundus* shewing hypostome in position p. 457 text-fig. 409c, PARKER & HASWELL 19.—*P.* sp. in Devonian of Japan p. 455, YABE 38.

Phillipsia sp. p. 145, STOCKDALE 28.—*P.*-like forms in Permian of Japan p. 455, YABE 38.

Phylacterus welleri revised generic reference for *Pseudosalteria w.* Raymond 1924 p. 39, RESSER 24.

Phillipsia defined, discussed and compared with related genera p. 649 *P. mucronata* McCoy referred to *Weberides* gen. n. p. 653, *P. derbiensis* Auct. referred to *Cummingella* gen. n. p. 670, REED 22.

Platycolpus whitfieldi sp. n. for *Dike-locephalus barabuensis* Whitfield 1878 non Winchell 1864 Cambrian U.S.A. (Wis.) p. 40, *P. barabuensis* (Winchell 1864) *partim* described p. 39, RESSER Smithson. misc. Coll. 101 15 1942.

Platypteltis discussed and compared with *Psilicephalus* & *Symphysurus* p. 308, *P. primaeva* sp. n. Tremadoc Britain (N. Wales) p. 316 pl. xlv fig. 10, *P. crofti* p. 313 pl. xlv figs. 8, 9, text-fig. 56 p. 314, *P. incipiens* revised generic reference for *Symphysurus i.* Brögger 1832 p. 315, LAKE Monograph of the British Cambrian Trilobites Paleont. Soc. London 1942.

Plethometopus sp. in Cambrian of Champlain Valley U.S.A. p. 524, WHEELER 36.

Plethopeltis granulosa sp. n. for *Ptychaspis speciosus* Walcott 1912 *partim* (pl. xliii figs. 18, 18a) & *Agraulosaratogensis* Walcott 1912 *partim* (pl. xliii figs. 14, 14a) Cambrian U.S.A. (New York) p. 41, *P. saratogensis* restricted, *P. walcotti* p. 41, RESSER Smithson. misc. coll. 101 15 1942.

Pliomeridae defined and new genus proposed p. 473, HOLLIDAY 8.

Portlockia McCoy 1846 considered invalid because of confusion concerning genotype p. 15, *P. primaevus* Cooper 1940 referred to *Eophacops* p. 28, DELO 3.

Proampyx burea referred to *Lioparia* p. 28, RESSER 24.

Proasaphiscus eriopia revised generic reference for *Anomocare eriopia* Walcott 1916, *P. rectangularis* for *Lisania rectangularis* Sun 1924 p. 42, RESSER 24.

Probolium diagnosis distribution and discussion of genus p. 76, *P. nasutus* p. 77 pl. viii figs. 21, 22, pl. ix fig. 1, *P. tridens* p. 78 pl. viii fig. 25, pl. ix figs. 2, 3, *P. palaceus* revised generic reference for *Dalmanites* p. Savage 1913, p. 77 pl. viii figs. 23, 24, DELO Spec. Papers Geol. Soc. Amer. 29 1940.

Probowmania fongi revised generic reference for *Ptychoparia fongi* Sun 1924 p. 42, *P. granosa* for *Pt. granosa* Walcott 1905 p. 43, RESSER 24.

Proetidae see *Cummingella*, *Cyphinioides*, *Eocyphinium*, *Weberides* gen n. n.

Proetus vicinus sp. n. Ordovician Britain (Ayrshire) p. 159 pl. viii fig. 1, REED Ann. Mag. nat. Hist. [11] 6 1940; *P. turgidus* p. 233 pl. xxvi figs. 8, 9; *P. cf. turgidus* p. 233 pl. xxvi fig. 10, *P. acutiliratus* p. 233 pl. xxvi fig. 11 spp. n. Silurian Canada (Quebec) NORTHROP Spec. Papers Geol. Soc. Amer. 21 1939; *P. rowi* p. 558 pl. lxxxiv. fig. 58 STUMM 30.—*P. phocion* p. 23, CLARK 2.—*P. postcarbonarius* Gemmellaro interpretation of original figures revised so that the thorax may consist of 9 (not 10) and the cephalon may have a normal occipital ring; referred to *Ditomopyge* Weller (= *Cyphinium* Weber), or alternatively if that genus is invalid as claimed by Gheyselinck to *Griffithides* (*Pseudophillipsia*) p. 487 text-figs. 1-4, 6, WEBER 34.—*P. tenuituberculatus*, J. S. Williams' 1930 description of colour pattern in pygidium discussed p. 710 figure reproduced pl. i fig. 4, WELLS 35.—*P. (Phaeton) slatkowskii* Schmidt referred to *Kootenia* p. 27, RESSER 24.

Prosaukia barabuensis sp. n. for *Dicellosephalus pepinensis* Winchell 1864 *partim* cephalon, *D. minnesotensis* Winchell 1864 *partim* pygidium & *Ptychaspis barabuensis* Winchell 1864 *partim* cheek, Cambrian U.S.A. (Wisc.) p. 43, *P. welleri* sp. n. for *Calvinella newtonensis* Walcott 1914 *partim* Cambrian U.S.A. (New Jersey) p. 44, *P. newtonensis* revised generic reference for *Dikelocephalus newtonensis* Weller 1903

p. 43, *P. tribulis* for *Dicellosephalus t.* Walcott 1912 p. 44, RESSER Smithson. misc. coll. 101 15 1942—*P. ?* or *Briscoia* ? "coarsely striated trilobite doublure," new allocation for *Conularia cambria* Walcott 1890 Cambrian U.S.A. (Wisc.) p. 104 footnote, RAASCH Spec. Papers Geol. Soc. Amer. 19 1939.

Prozacanthoides gaspensis sp. n. Cambrian Canada (Quebec) p. 639 pl. ii figs. 5-7 KINDLE Amer. J. Sci. New Haven 240 9 1942.

Pseudomera gen. n. [Pliomeridae] for type *Amphion barrandei* Billings 1865 p. 473 pl. lxxiii figs. 5-10, *P. ? nevadensis* (Walcott 1884) p. 474 pl. lxxiii figs. 11-16 pl. lxxiv fig. 6, *Pseudomera* sp. p. 475 pl. lxxiv fig. 5, HOLLIDAY J. Paleont. Menasha, Wis. 16 4 1942.

Pseudophillipsia guide fossil of Caraimian (Lower Permian) developed in Martian horizon (uppermost lower Permian) of Crimea p. 262, TUMANSKAYA 31.—*P.* see *Griffithides*.

Pseudosalteria welleri Raymond 1924 referred to *Phylacterus* p. 39, RESSER 24.

Psilaspis receives *Lioparella* Kobayashi 1937 in synonymy p. 44, *P. suni* sp. n. for *Anomocare flava* Sun 1924 non Walcott 1906 Cambrian China p. 45, *P. alcinoe* revised generic reference for *Anomocare a.* Walcott 1905 p. 44; *P. flava* for *A. flava* Walcott 1906, *P. blautoeides* for *Lioparia b.* Lorenz 1906, *P. speciosa* for *Anomocare s.* Lorenz 1906 p. 45; *P. walcotti* for *Lioparella w.* Kobayashi 1937, *P. baucis* for *Anomocarella b.* Walcott 1905, *P. contigua* for *A. contigua* Walcott 1906, *P. vesta* for *Ptychoparia vesta* Walcott 1906, *P. albion* for *Anomocarella a.* Walcott 1905 p. 46; *P. decelus* for *Anomocare d.* Walcott 1905, *P. bigsbyi* for *A. b.* Walcott 1905, *P. expansus* [error pro *expansus*] for *Lioparia e.* Kobayashi 1935, *P. tatian* for *Anomocare tatian* Walcott 1905 p. 47, RESSER Smithson. misc. coll. 101 15 1942.

Psilocephalus genus defined and discussed, compared with *Platypeltis*, *Symphysurus*, *Nileus* and *Symphysurina* p. 308, *P. innotatus* p. 311 pl. xlv figs. 2-7, *P. inflatus* Salter refigured and referred to *Iliaenus* ? p. 318, LAKE 14.

Pterygometopinacae—see Dalmanitidae.

Pterygometopus callicephalus Clarke 1894 non Hall 1847 renamed *Calliops plattevilensis* p. 98, *P. annulatus* Raymond 1905 referred to *Calliops* p. 92, *P. fredericki* Slocum 1913 to *C.* p. 96, *P. gracileus* to *C.* p. 96, *P. larabeei* Slocum 1913 to *C.* p. 97, *P. schmidti* Clarke 1894 to *C.* p. 99, *P. confluentis* Foerste 1919 to *Calyptaulax* p. 101, *P. eboraceus* Clarke to *Calyptaulax* p. 102, *P. holstonensis* Raymond 1925 to *Calyptaulax* ? p. 103, *P. lincolniensis* Branson 1909 to *Calyptaulax* p. 104, *P. intermedius* Clarke 1894 to *Eomonorachus* p. 107, *P. achates* Foerste to *Achatella* p. 110, *P. carleyi* Foerste to *A.* p. 111, *P. carleyi-rogersensis* Foerste 1919 to *A.* p. 111, *P. transsectus* Raymond 1925 to *A.* p. 113, DELO 3.—*P. harrisi* referred to *Calyptaulax* p. 102, OKULITCH 17.

Ptychoparia [error pro *Ptychoparia*] *tkachenkovi* sp. *nondesc.* recorded from Anabar (Siberia) p. 14, LERMONTOVA in VOLOGDIN 33.

Ptychaspis shansiensis, *P. brevicus* Sun 1935 referred to *Asioptychaspis* p. 6, *P. suni* Grabau in Sun 1923, "P." *asiatica*, "P." *sphaerica* Resser and Endo, *P. subglobosa* Sun 1935 *partim* referred to *Asioptychaspis* p. 7; *P. minuta* Whitfield 1878 referred to *Euptychaspis* p. 22; *P. suni* Kobayashi 1931 to *Haniwa* p. 23; *P. barabuensis* Winchell 1864 *partim* to *Platycolpus* p. 39, *P. speciosus* Walcott 1912 *partim* to *Platypeltis granulosa* p. 41, *P.* ? sp. undet. Walcott 1913 *partim* (pl. xvii fig. 1, pl. xxi fig. 14) to *Quadraticephalus bianos* p. 49, *P.* ? *fengshanensis* Sun 1935 to *Q.* p. 49, *P. speciosus* Walcott 1912 *partim* to *Saukea* p. 49, *P. barabuensis* Winchell 1864 *partim* to *Tellerina winchelli* p. 53, RESSER 24.

Ptychoparella ? *gaspensis* p. 639 pl. ii figs. 9, 10, *P.* ? *murphyi* p. 640 pl. ii fig. 12 spp. n. Cambrian Canada (Quebec), KINDLE Amer. J. Sci. New Haven 240 9 1942.

Ptychoparia rogersi Walcott 1884 referred to *Braintreella* p. 568, WHEELER 37.—*P. undata* Walcott 1905 referred to *Aojia* p. 6, *P. (Euloma) ? affinis* Walcott 1884 referred to *Berkeia* p. 7, *P. gibbsi* Walcott 1916 referred to *Chariocephalus* p. 11, *P.* ? *maia* Walcott 1906 to *Eymekops* p. 23, *P. titiana* Walcott

1905 made genotype of *Inouyops* p. 25, *P. inflata* Walcott 1905 referred to *Inouyops* p. 25; *P. (Proampyx) burea* Walcott 1905 referred to *Lioparia* p. 28; *P. tellus* Walcott 1905 referred to *Lisania* ? p. 28, *P. yohi* Sun 1924 referred to *Manchuriella*, *P. leichuangensis* Sun 1924 to *M.* ? p. 28, *P. impar* Walcott 1905 to *M.*, *P. impar* var. Walcott 1905 to *M. yenchouensis* p. 29, *P.* ? sp. undet. Walcott 1899 'pl. lxvi fig. 3 referred to *Orygmaspis weedi* p. 37, *P. talingensis* Kobayashi 1937 to *Peishania* p. 38, *P. (Agrauios) saratogensis* Walcott 1886 to *Plethopeltis* p. 41, *P. (Emmrichella) eriopia* Walcott 1931 (error pro 1913) to *Proasaphiscus* p. 42, *P. (Liostracus) intermedia* Walcott 1906 to *Solenoparia* p. 51, *P. tolus* Walcott 1905 to *Solenoparia* p. 52, *P. blairi* and *P. neutonensis* Weller 1903 to *Triarthropsis blairi* p. 55, RESSER 24.

Ptychopariidae (Nassovinae) new genus erected *Braintreella* p. 568, WHEELER Amer. J. Sci. New Haven 240 8 1942.

Ptychopleurites eurekaensis revised generic reference for *Richardsonella e.* Kobayashi 1935 p. 48, RESSER 24.

Quadraticephalus Sun 1924 taken to include *Changia* Sun 1924 p. 48, *Q. chosensis* 1935 revised generic reference for *C. c.* Kobayashi 1935 and *Q. chinensis*, *Q. shakoutunensis* for *C. c.*, *C. s.* Sun p. 49, *Q. bianos* for *Anomocare bianos* Walcott 1905, *Q. fengshanensis* for *Ptychaspis* ? f. Sun 1935 p. 49, RESSER Smithsonian. misc. Coll. 101 15 1942.

Redlichia p. 107, STUBBLEFIELD 29.

Reedops diagnosis, distribution and discussion of genus p. 24, *R. deckeri* p. 25 pl. i figs. 26–28, DELO 3.

Saimachia ? *flava* Kobayashi 1937 referred to *Psilaspis* p. 45, RESSER 24.

Saukia eboracensis sp. n. for *Lonchocephalus calciferus* Walcott 1912 *partim* (i.e. pl. xliii fig. 9) and *Dicelloccephalus harti* Walcott 1912 *partim* (pl. xlii figs. 7, 7a) Cambrian U.S.A. (New York) p. 49, *S. speciosa* revised generic reference for *Ptychaspis speciosus* Walcott 1879 p. 49, *S. stosei* Walcott 1914 *partim* (pl. lxx figs. 12, 12a) referred to *Tellerina scotlandensis*, RESSER Smithsonian. misc. coll. 101 15 1942.

Schantungia monkei Lorenz and *S. crassa* Lorenz referred to *Chuangia* p. 12, RESSER 24.

Scotiella diagnosis, distribution and discussion of genus p. 33, *S. obsoleta* sp. n. Silurian U.S.A. (Tennessee) p. 34 pl. ii figs. 21, 22 ULRICH & DELO in DELO, *S. logani* p. 33 pl. ii figs. 14-17, *S. logani conservatrix* p. 34 pl. ii figs. 18-20, DELO Spec. Papers Geol. Soc. Amer. 29 1940.

Semnocephalus gen. n. for type *Solenopleura*? *weedi* Walcott 1899 *partim* (pl. lxx fig. 9) p. 51, *S. minor* sp. n. for *Solenopleura*? *weedi* Walcott 1899 *partim* (pl. lxx fig. 9a) p. 51, Cambrian U.S.A. (Montana), RESSER Smithsonian, misc. Coll. 101 15 1924.

Shirakiella carme revised generic reference for *Anomocarella carme* Walcott 1905 p. 51, RESSER 24.

Shumardia sp. undet. Walcott 1913 referred to *Solenoparia intermedia* p. 51, RESSER 24.

Solenoparia intermedia revised generic reference for *Ptychoparia* (*Liostracus*) *intermedia* Walcott 1906 p. 51; *S. pauperata* for *Solenopleura pauperata* Walcott 1913; *S. tolus* for *Ptychoparia*? *tolus* Walcott 1905 p. 52, RESSER 24.

Solenopleura nodosa Sun 1924 referred to *Emmrichella* Walcott 1911 p. 21, *S.?* *weedi* Walcott 1899 referred to *Semnocephalus weedi* and *S. minor* p. 51; *S. intermedia* Walcott 1913 to *Solenoparia* p. 51, RESSER 24—*S.* p. 48 [wrongly spelt *Colenopleura* p. 14] cf. *zwerevi* sp. *nondesc.* near to *S. brachymetopa* recorded from Siberia (Anabar) p. 14 [48], LERMONTOVA in VOLOGDIN 33.

Solenopleurella gaspensis sp. n. Cambrian Canada (Quebec) p. 640 pl. ii figs. 15-17, KINDLE Amer. J. Sci. New Haven 240 9 1942.—*S. resseri* revised generic reference for *Boluspis*? *resseri* Miller 1936 p. 52, RESSER 24.

Stephanocare chaoi sp. n. for *S. richthofeni* Sun 1924 non Monke Cambrian China p. 52, RESSER Smithsonian, misc. coll. 101 15 1942.

Symphysurina in Ordovician of Champlain Valley U.S.A. p. 524, WHEELER 36.—*S.* discussed p. 310, LAKE 14.

Symphysurus discussed and compared with *Platypeltis*, *Psilocephalus*, *Nileus* and *Symphysurina* p. 308, *S. palpebrosus* text-fig. 5a p. 314, *S. incipiens* Brögger 1882 referred to *Platypeltis* p. 315, *S. breviceps* referred to *Nileus* p. 310 LAKE 14.

Synphoria diagnosis, distribution and discussion of genus p. 65, *S.?* *concinus* revised generic reference for *Dalmanites* c. Hall 1876, p. 65 pl. vii figs. 7, 8, *S. dolbeli* for *D. d.* Clarke 1907, p. 66 pl. vii figs. 14-17; *S.?* *lowi* for *D. l.* Clarke 1907, p. 67 pl. vii figs. 12, 13; *S.?* *meeki* for *D. m.* Walcott 1884 p. 67 pl. vii figs. 18-20; *S.?* *whiteavesi* for *D. w.* Clarke 1907 p. 69 pl. vii figs. 10, 11; *S. stemmatus* p. 68 pl. vii figs. 1-3, *S. stemmatus convergens* p. 68 pl. vii figs. 4-6, *S.?* *concinus serrula* pl. vii fig. 9, DELO 3.

Synphoriinae see Dalmanitidae.

Synphoroides gen. n. [Dalmanitidae Synphorinae] for type *Dalmanites* (*Probolium*) *biardi* Clarke 1907 p. 78 pl. ix figs. 4-7; *S. dolphi* revised generic reference for *Dalmanites d.* Clarke 1893, p. 79, pl. ix fig. 10; *S. esnoufi* for *D. (P.) esnoufi* Clarke 1907, p. 80 pl. ix fig. 8; *S. griffoni* for *D. g.* Clarke 1907, p. 80 pl. ix fig. 9; *S. multiannulatus* Ohern 1913, p. 81 pl. ix figs. 11-14; *S. pleuroptyx* for *Asaphus pl.* Green 1832 p. 82 pl. ix figs. 15-17 Devonian N. America, DELO Spec. Papers Geol. Soc. Amer. 29 1940.

Taitzia Resser & Endo considered to include species previously referred to *Menocephalites* Kobayashi 1935 thus *T. abderus*, *T. acanthus*, *T. acerius*, *T. ocidalia*, *T. acis*, *T. admata*, *T. agave* Walcott spp.; *T. adrastia* revised generic reference for *Menocephalus adrastia* Walcott 1905 p. 53, RESSER 24.

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Trypanulites diagnosis, distribution and discussion of genus p. 85, *T. calypso* p. 85 pl. x fig. 9, *T. erinus* p. 86 pl. x figs. 10, 11, *T. macrops* p. 86 pl. x fig. 12, DELO 3.

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12. ARACHNIDA

TO WHICH ARE ADDED

MEROSTOMATA, PANTOPODA, TARDIGRADA, PENTASTOMIDA,
MYRIOPODA, AND PROTOTRACHEATA.

ARRANGED BY

E. BROWNING.

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E. testacea new to Peninsula p. 27, MACHADO 236.

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Harvard 86; *T. brevipalpus* sp. nov. Virgin Is., p. 341 figs.; *T. cybele* sp. nov. Virgin Is., p. 342 fig.; *T. virginus* sp. nov. Virgin Is., p. 344 fig., BRYANT Bull. Mus. Comp. Zool. Harvard 89.—*T. maricaoensis* sp. nov. ♂ Maricao Forest, Puerto Rico p. 2 figs., BRYANT J. Agric. Univ. P.R., Rio Piedras 26.—*T. parumotui* sp. nov. ♀ Henderson Id., Tuamotus p. 16 fig.; *T. rapanae* sp. nov. Rapa p. 15 fig., BERLAND Occ. Pap. Bishop Mus. Honolulu 17.—*T. arcadicum* sp. nov. ♀ west of Arcadia, De Soto Co., Florida p. 4 fig.; *T. catalinae* sp. nov. ♀ Bear Wallow, Santa Catalina Mts., Arizona p. 6 fig.; *T. catapetraeum* sp. nov. ♀ north of Royal Palm State Park, Dade Co., Florida p. 10 fig.; *T. cheimatos* sp. nov. ♀ Winter Park, Orange Co., Florida p. 3 figs.; *T. dividuum* sp. nov. ♂ Pea River Project, Dale Co., Alabama p. 6 fig.; *T. dulcineum* sp. nov. Cypress Creek, Lauderdale Co., Alabama p. 4 figs.; *T. hobbsi* sp. nov. ♀ Gainesville, Alachua Co., Florida p. 5 fig.; *T. indianorum* sp. nov. Indian Town, Martin Co., Florida p. 9 figs.; *T. jeanae* sp. nov. Summer Haven, Santa Catalina Mts., Arizona p. 7 figs.; *T. lawrencei* sp. nov. ♂ Jackson Co., Oregon p. 8 fig.; *T. leechi* sp. nov. Salmon Arm, British Columbia p. 8 figs.; *T. maderae* sp. nov. Madera Canyon, Santa Rita Mts., Arizona p. 12 figs.; *T. mohave* sp. nov. ♀ nr. Twenty Nine Palms, Mohave Desert, California p. 9 fig.; *T. paradisiacum* sp. nov. Hillsborough River State Park, Hillsborough Co., Florida p. 11 figs.; *T. ritae* sp. nov. ♂ Madera Canyon, Santa Rita Mts., Arizona p. 7 fig.; *T. serenoae* sp. nov. Dauphin Id., Mobile Co., Alabama p. 10 figs.; *T. wallacei* sp. nov. ♀ Gator Sink, Alachua Co., Florida p. 5 fig.; *T. alabamense* nom. nov. for *T. cinereum* Emerton preocc. p. 4; *T. sex-setosum* redescrib. p. 3 figs., GERTSCH & ARCHER Amer. Mus. Nov. 1171.—*T. açoreensis* new to continental fauna p. 22 figs.; *T. bimaculatum pellucidum* new to Portugal p. 26, MACHADO 236.—*T. tepidariorum* descript. of egg sac p. 17, PIERCE 297.

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†*Liticen* **gen. nov.** *setosus* **sp. nov.** in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†*Malleator* gen. nov. *niger* sp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†*Meditrina* gen. nov. *circumvallata* sp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

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†*Theridiometa* gen. nov. *edwardsi*, *T. robusta*, *T. samlandica* spp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

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†*Caprix* gen. nov. *lineata*, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

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†*Caduceator* gen. nov. *minutus* sp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

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†*Facundia* gen. nov. *clara* sp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

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†*Parevophrys* gen. nov. *succini* sp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

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†*Adjutor* gen. nov. [Adjutoridae] *mirabilis* sp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†Adjutoridae fam. nov., PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†*Admissor* gen. nov. [Adjutoridae] *aculeatus* sp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†*Adorator* gen. nov. [Spatiatoridae] *brevipes*, *A. samlandicus* spp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†*Arthrodictyna* gen. nov. [Arthrodictynidae] *segmentata* sp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†Arthrodictynidae fam. nov., PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†*Inceptor* gen. nov. [Inceptoridae] *aculeatus* sp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†Inceptoridae fam. nov., PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†*Insecutor* gen. nov. [Insecutoridae] *aculeatus*, *I. mandibulatus*, *I. rufus* spp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†Insecutoridae fam. nov., PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†*Spatiator* gen. nov. [Spatiatoridae] *praeceps* sp. nov. in Baltic amber, PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

†Spatiatoridae fam. nov., PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. 34.

ACARI.

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[with the exception of Hydrachnoidea and Ixodoidea].

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13. INSECTA

BY

THE IMPERIAL INSTITUTE OF ENTOMOLOGY

FOREWORD

THE attention of readers is directed to the fact that, beginning with Vol. 74 (1937), the systematic part of the Record is reserved only for information of purely taxonomic value. References to data on morphology, physiology, bionomics, ecology, distribution and other general problems must be looked for in the Subject Index, where they are arranged by orders under each heading. The classification of headings in the Subject Index has been revised in order to make the information more complete and readily available. It is hoped that this change will render the Record of more value for entomologists working on general problems, without affecting its importance for taxonomists.

Entomological papers written entirely from an economic point of view are omitted, but abstracts of these will be found in the *Review of Applied Entomology*.

Very brief papers, usually those dealing with a single species, are noticed either in the Subject Index or in the systematic part, but do not appear in the list of titles.

The writers of systematic papers are requested to mark new synonyms with the words (*n. syn.*), as otherwise it is impossible to ensure that they will be correctly recorded.

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Samoa. **Hymenoptera** : FULLAWAY, parasitic Hym., check list and new Braconids, 547.

Santa Cruz Is. **Lepidoptera** : CARPENTER, *Euploea boisduvalii* f. n. (Danaid.), 244.

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Lepidoptera : REINIG, Parnassiinae (Papil.), evolution and distribution, 1172.

Diptera : SÉGUY, *Wohlfahrtia* (Caliph.), key, 1249.

Orthoptera : UVAROV, Palaearctic Acrididae in Indian fauna, 1438.

Trichoptera : NIELSEN, 1041.

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Coleoptera : JANSSON, *Xyletinus* (Anobiid.), Sweden, key, 773; LINDROTH, endemic Carabidae, Fennoskandia, 896.

Hymenoptera : PERKINS, Aculeata, S. Skåne, Sweden, 1938, 1094; Serphinae, S. Sweden, 1098; WAHLGREN; *Xestophanes* (Cynip.), Sweden, 1487.

Lepidoptera : BENANDER, Zetterstedt's Microlepidoptera, Lapland,

revision, 102; KJELLANDER, some spp., Sweden, 820.

Diptera : RINGDAHL, *Eristalis* (Syrph.), Sweden, key, 1189; THIENEMANN, Chironomidae, Lapland, list, 1376.

Hemiptera : OSSIANNILSSON, *Cixius*, Sweden, 1056; Heteropt., Cicadina, Psyllina, Aphidina, Sweden, 1057; Stockholm, 1059; WAHLGREN, Aphids, Skåne, Sweden, 1486.

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Coleoptera : BALFOUR - BROWNE, aquatic Col., E. & W. Sussex, 63; aquatic Col. (incl. Hydrophilidae, Sphaeridiinae), N. Wales, 67; VAN EMDEN, families, keys to larvae, 445; KAUFMANN, Hertfordshire, further records, 800.

Hymenoptera : KERRICH, Ichneumonids, second review of literature, 809; SPOONER, Aculeata, Bedfordshire, 1308.

Lepidoptera : BEIRNE, Microlep., Microlep., Ireland, 93, 97; DONOVAN, Microlep., Gloucestershire, list, 412; FLETCHER & CLUTTERBUCK, Microlep., Gloucestershire, list, 501; FOSTER, Hertfordshire, additions, 514; TURNER, Noctuids & vart., suppl., 1408.

Trichoptera : KIMMINS, *Cynurus*, key, 815.

Ephemeroptera : KIMMINS, *Ecdyonurus*, revision, 813; keys, 817.

Diptera : AUDCENT, Tachinids, preliminary list of hosts, 51; COE, *Chamaemyia* (Sciomyz.), 290; MARSHALL, mosquitos, list, 962.

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Hymenoptera : DE BEAUMONT, *Astata* revision, *Oxybelus* (Spheg.), Switzerland, 86, 87; KOSTULEV, *Pterochilus* (Masar.), key, 843.

Lepidoptera : WARNECKE, *Larentia blomeri* (Geom.), distribution, 1499.

Diptera : LANDROCK, Mycetophilidae, Germany, revision, 862.

Siphonaptera : JACOBSON, Mecklenburg, 761.

Orthoptera : WILLEMSE, Holland, catalogue, 1540.

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Hymenoptera : GINER MARÍ, Spain, list, 573; GOETSCH, ants, Spain, 580.

Lepidoptera : AGENJO, *Hepialus* spp., Spain, distribution, 11.

Diptera : BRAGA, Pupipara, Portugal, 161.

Hemiptera : DEL CAÑIZO, *Eurygaster* (Pentat.), Iberian Peninsula, 234.

Orthoptera : MORALES AGACINO, *Dociostaurus* (Acrid.), Spain, 1008; Acridids, Spain, keys, 1010; UVAROV, *Paracaloptenus* (Acrid.), revision, 1441.

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Hymenoptera : DONISTHORPE, Siwa Oasis, Formicids, 400; GINER MARÍ, *Cerceris* (Spheg.), revision, 572.

Lepidoptera : CHNEOUR, Macrolep., Tunisia, 261.

Diptera : PARROT & PICHEYRE, *Phlebotomus* (Psychod.), Hoggar, 1074.

Hemiptera : RUNGS, Coccidae, Spanish Sahara, list, 1206.

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Hymenoptera : ARNOLD, *Cerceris* (Spheg.), 43; COCKERELL, Hylaeidae (Apid.), 288.

Lepidoptera : JANSE, Hepialidae, Micropterygidae, S. Africa, 771; WHYBROW, Rhopalocera, Malangali, Tanganyika, preliminary list, 1532.

Diptera : DE MEILLON, *Anopheles*, Moçambique, 379; VAN EMDEN, *Dichaetomyia* (Musc.), revision, 442; HARRIS, Culicines, Tanganyika, 659; MEESER, Simuliidae, N. Rhodesia, list, 972.

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Orthoptera : EBNER, Gryllidae, Tettigoniidae, Anglo-Egyptian Sudan, 429; REHN, *Parasphena* spp. (Acrid.), list, 1156; UVAROV, *Ornithacris* (Acrid.), revision, 1435; *Catanops* group *dioratus* (Acrid.), prelim. revision, 1436; *Clonia* (Tettig.), revision, 1440.

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Diptera : BROMLEY, Asilids, 173.

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Hemiptera : MAMET, *Pedrococcus* gen. et spp. n. (Coccid.), 951.

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Coleoptera : REICHARDT, Sphaeritidae, Histeridae (pt. 1), U.R.S.S., 1160.

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Lepidoptera : BRYK, Parnassiinae (Papil.), Tibet, 206.

Diptera : KESHISH'YAN, Culicidae, Tadzhikistan, 810; LEESON, *Anopheles*, key, Syria, 879.

Hemiptera : GHULAM ULLAH, Aphids & Rhynchota, Afghanistan, 566.

Orthoptera : TARBINSKIĭ, Saltatoria, Caucasus, catalogue; Azerbaidjan, revision, 1363.

Thysanura : WYGODZINSKY, Palestine, 1566.

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Coleoptera : ANDREWES, *Abacetus* (Carab.), India, key, 34; ARROW, Melolonthidae, Burma, Br. India, 46; BENICK, Staphylinidae, Burma & Br. India, 106; BORCHMANN, Lagriids, Cistelids, India & Burma, 149; CHIANG, Longicornia, Kwangsi, 258; FLEUTIAUX, Elaterids, Burma & Br. India, 502; GRESSITT, Longicornia, Kwangtung, second suppl., 607; Phytophaga, S. & W. China, 608; MARSHALL, *Cyphicerinus* (Curc.), India, key, 960; *Crinorrhinus* (Curc.), key, 961.

Hymenoptera : DONISTHORPE, Formicids, Southern India, 402; GINER MARÍ, *Cerceris* spp. n. (Spheg.), E. China, keys, 574; PRUTHI & MANI, Serphoidea, Bethyloidea, India, distribution, 1127.

Lepidoptera : BRYK, Macrolepidoptera, Kurile Is., 205; CORBET, *Euploea* (Danaid.), 308; SCOTT, Spingidae, Darjeeling and Sikkim (contd.), 1244; FINDALE, Hepialidae, revision, 1333.

Trichoptera : MOSELY, Foochow, China, 1013.

Diptera : ALEXANDER, Tipulids, Yunnan & Kwangtung, 19; Tipulidae, India, list, 21; HERING, Trypetidae, suppl., 687.

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Odonata : CHÛJÔ; Borodino Is., Loo-Choo Is., 264; FRASER, *Helio-gomphus*, list, key, 533; KOBAYASHI, Loo-Choo Is., 833.

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Hymenoptera : DONISTHORPE, new ants, Philippines, 401.

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Hemiptera : MCKENZIE, *Chrysomphalus* sp. n. (Coccid.), Philippines, Microentomology 4 1939 p. 76 fig.; USINGER, *Erianotus* sp. n. (Leptopodid.) Philippines, 1426.

Odonata : FRASER, Fed. Malay States, 532 ; *Heliogomphus*, list, key, 533.

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Lepidoptera: BROOKS, butterflies, Manitoba, revised check list, 175; FICHT, Noctuidae, Indiana, 490; FORBES, Dry Tortugas Is., 506; FREEMAN, Hesperidae, 534; HARDY, *Erebos odora* (Noct.), Canada, records, 642; LANGE, *Platyptilia* (Pteroph.), California, key, 867; MICHENER & DOS PASSOS, *Strymon* (Lycaen.), key to spp. of *calanus* group, 989; REMINGTON, *Hemiargus isola* (Lycaen.), east of Mississippi River, 1174; RICHARDS, *Gabara* (Noct.), East U.S., revision, 1181; WATSON, some records, Florida, 1503; WOOD & GOTTSCHALK, butterflies, Roanoke & Montgomery counties, Virginia, 1556.

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Siphonaptera: JELLISON & GOOD, index to literature, list of spp., 777; SVIHLA, Washington, list, 1335.

Hemiptera: BEAMER, *Twiningia* (Jass.), revision, 83; FERRIS, Coccids, IV, 484; FROESCHNER, Coreidae, Aradidae, Neididae, Missouri, keys and list, 541; HEPNER, *Aligia* (Jass.), revision, 683; *Eutettix* (Jass.), revision, 684; PADLEY, Jassidae, Iowa, list, 1062; RAU, *Phenacoccus* (Coccid.), N.E. America, key, 1142; USINGER, Triatominae (Reduv.), distribution, 1425.

Anoplura: JELLISON, distribution, 776.

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Insecta: MURRAY-AARON, Herbert Morrison's travels in Mexico, 1029.

Coleoptera: SAYLOR, *Phyllophaga* (Melol.), key to subgen., 1227.

Hymenoptera: MALAISE, Selandriini (Tenth.), key to genn., 946; WEBER, fungus-growing ants, Barro Colorado I., Canal Zone, 1511.

Diptera: FAIRCHILD, Tabanids, Panama, 471-473; KUMM & RUIZ SOTO, mosquitos, Costa Rica, list, 857; KUMM & ZÚNIGA, mosquitos, El Salvador, 858.

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Hemiptera: MONTE, *Megalocysta* (Ting.), key, 1004; USINGER, Triatominae (Reduv.), distribution, 1425.

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Lepidoptera: BROWN, *Papilio*, Ecuador, 181; FORBES, Rhopalocera, Venezuela, list, 507; HAYWARD, Hesperiiidae, Argentina, catalogue, 670; DE MARTIN, Peru, list, 963; SCHAEFER & BREYER, Catamarca, Argentina, list, 1229A; SCHWEIZER & KAY, Rhopalocera, Uruguay, systematic catalogue, 1241; URETA R., Rhopalocera, Bolivia, 1418; ZIKÁN, Brazil, exotic elements, 1580.

Diptera: ALEXANDER, Tipulidae, Brazil, 23; ANDUZE, Culicidae, Venezuela, additions, 36; BRICENO-TRAGORRY, Simuliidae, Venezuela, list, 168; CORRÊA & RAMOS, *Anopheles* (Culic.), São Paulo, Brazil, 316; GOMES, *Anastrepha*, *Lucumaphila* (Tryp.), Brazil, list, 585; LANE, Dixinae, Chaoborinae (Culic.), revision, 865; MACKERRAS & FULLER, *Pelecorhynchus* (Taban.), revision, 940; DE OLIVEIRA, mosquitos, Matto Grosso, Brazil, 1051; SÉGUY, *Hippelates* (Chlorop.), Colombia, Venezuela, 1250; SENEVET & ABONNENC, *Anopheles* (*Stethomyia*) (Culic.), Fr. Guiana, 1254.

Siphonaptera: FULLER, 550; JORDAN, Argentina, 789.

Hemiptera: DA COSTA LIMA, Brazil, Homoptera, 325; *Aleurothrixus* (Aleurod.), Brazil, key, 329; FUNKHOUSER, Membracidae, Br. Guiana, 552; KUITERT, Gerrinae, 853; LENT,

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Dermaptera: RIBEIRO, Brazil, 1177.

Orthoptera: LIEBERMANN, Procolpinae (Acrid.), Argentina, 889; Jivari group (Acrid.), revision, 890; LIEBERMANN & PIRÁN, Acrididae, Uruguay, preliminary list, 891; PIRÁN, Tettigoniidae, Gryllacridae, Argentina, catalogue, 1114; REHN, Tristirae group (Acrid.), revision, 1158.

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Hymenoptera: BEQUAERT, *Monobia* sp. n. (Vespid.), Porto Rico, 108; GINER MARÍ, *Cerceris* (Spheg.), Cuba, revision, 571; KROMBEIN, Myzininae (Tiphid.), revision, 851.

Lepidoptera: CLENCH, *Hemiargus catilina* subsp. n. (Lycaen.), *Eurema chamberlaini* subsp. n. (Pierid.), Cat I., Bahamas, 275, 276; COMSTOCK, Nymphalidae, 304; MUNROE, *Anartia jatrophae* (Nymph.), Caribbean rr., 1026; SCHAUS, Geometridae, Pyralidae (particularly Porto Rico, Virgin Is.) revision, 1233.

Trichoptera: BANKS, genn. et spp. n., Cuba, Haiti, Santo Domingo, 68.

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Diptera: BEQUAERT, Hippoboscidae, list, 107; FAIRCHILD, *Tabanus vittiger* subsp. n., Cayman Is., 471; HARDY, *Plecia* spp. n. (Bibion.), Cuba, Antigua, 638; HULL, *Mesogramma* spp. n., *Chrysogaster* sp. n. (Syrph.), Dominican

Rep., St. Vincent, Cuba, Haiti, **738**, **739**, **741**; LANE, *Dixa*, *Corethrella* spp. n. (Culic.), Porto Rico, **865**; STONE, *Anastrepha* spp. n. (Trypet.), Haiti, Cuba, **1323**.

Hemiptera: BRUNER, *Montea* gen. et sp. n. (Tingid.), Cuba, **192**; DRAKE & HARRIS, *Rheumatobates* sp. n. (Gerr.), Cuba, **422**; FENNAH, Kinnaridae, **478**; new Flatids, **479**.

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Key to *Phyllophaga* and allied gen. of the World, SAYLOR Proc. U.S. nat. Mus. 92 no. 3145 p. 160.

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Ancylonycha Dej. (= *Holotrichia* Hope) a valid genus p. 164; *mindanaona* Brenske characters p. 165, SAYLOR Proc. U.S. nat. Mus. 92 no. 3145.

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veg. Santiago 1.—*P.* key to spp. of subgen. *Graphognathus* in U.S.A. p. 109; (*G.*) *minor*, (*G.*) *pilosus* p. 107, (*G.*) *striatus* p. 108, (*G.*) *dubius* p. 109, spp. n. U.S.A., BUCHANAN Bull. Brooklyn ent. Soc. 37.—*P. glaucus* notes p. 301 fig., DA COSTA LIMA An. Acad. bras. Ci. 13 1941.

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Hylurgopinus rufipes early stages p. 87 fig., WALLACE & BEARD Canad. Ent. 74.

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Pseudopanurgus semirufum Ckll. from *Camptopoeum* p. 275, MICHE-
NER J. N. Y. ent. Soc. 50.—*P. illinoensis* Cress. (= *compositarum* Rob.) p. 190, BRADLEY Ent. News 53.

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NER J. N. Y. ent. Soc. 50.

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Astata revision of Swiss spp. pp. 401-412, key p. 402; (*A.*) *stecki* Switzerland, France etc. p. 407, (*A.*) *gallica* France, Morocco p. 413 spp. n.; *costai* Piccoli discussed p. 408 figs., de BEAUMONT Mitt. Schweiz. ent. Ges. 18.—*A. massiliensis* further description p. 78 figs., GINER MARÍ Eos 18.

Bembex ebusiana ♂ p. 80 figs., GINER MARÍ Eos 18.

Cerceris macrosticta Vier. & Ckll. (= *ampla* Banks); *deserta* Say (= *fulvipes* Cress., *fulvipediculata* Schlet.) p. 187; *morata* Cress. (= *nasica* Vier. & Ckll., *platyrhina* V. & C.); *prominens* Banks (= *alaope* Banks); *convergens* Vier. & Ckll. (= *rinconis* V. & C., *pudorosa* Mick.) p. 188; *serripes* F. synonymy; *clypeata* Dahl. discussed p. 189, SCULLEN Pan-Pacif. Ent. 18.—*C.* notes on African spp. pp. 1-25; *nigrifrons* subsp. n. *ancilla* Liberia p. 7; *egena* p. 8, *inconspicua*, *mazimba* p. 9, *macalanga* p. 12, *monticola* p. 13 (with var. n. *campicola* Belg. Congo), *arnoldi* p. 14, *monocera* p. 19, *bothavillensis* p. 23 ♂♂; *grigua* E. Griqualand p. 10, *umhlangae* Natal p. 15, *aterrima* Uganda p. 18, *xanthogaster* p. 21, *flavofemorata* p. 22 spp. n.; *nephthys* subsp. n. *platyrhyncha* p. 20 S. Rhodesia; *heterospila* ♀ p. 12; *ephippiorhyncha* Arn. a var. of *don-doensis* p. 15; *armaticeps* Cam., *eulalia* Brauns, *decolorata* Arn. varr. of *rufiscutis* Cam. p. 15; *delepineyi* Arn., *nemaensis* Arn. varr. of *erythrocephala* p. 23 figs., ARNOLD J. ent. Soc. sthn. Afr. 5.—*C. quadrimaculata* notes p. 317,

DEL JUNCO Y REYES Bol. Soc. esp. H. n. 39 1941.—*C.* revision of Cuban spp. pp. 321–335; *cerverae* sp. n. Cuba p. 333 figs., GINER MARÍ Bol. Soc. esp. H. n. 39 1941.—*C.* revision of N. African spp. (concl'd.) pp. 241–291; *escalerae* p. 248, *pardoi* p. 268, *ceballosi* p. 278 Morocco, *berlandi* Algeria p. 265, spp. n.; *hartliebi* Schulz (= *pseudoerythrocephala* Schulth.) p. 241; *gynochroma* Mochi raised to sp. rank p. 244; *lindenii* ♂ p. 253 figs., GINER MARÍ Eos 17 1941.—*C.* (*Apiratryx* [sic, ? *Apiraptrix*]) *coelicola* p. 116, (*A.*) *confusus* p. 118, (*A.*) *dubitabilis* p. 119, (*A.*) *klapperichi* p. 121, (*A.*) *stöckleini* p. 123, (*A.*) *spinicollis* p. 126, (*C.*) *erronea* p. 128, (*C.*) *rothi* p. 130, (*C.*) *martialis* p. 132, (*C.*) *caelebs* p. 133, (*C.*) *mickeli* p. 136, (*C.*) *diabolicus* p. 139, (*C.*) *fukiensis* p. 140, (*C.*) *kwangtsehiana* p. 143, spp. n. E. China figs., GINER MARÍ Eos 18.

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Chlorion cyaneum Dahlb. (= *caeruleum* L.) p. 286, FERNALD Ent. News 53.—*C. dolosum* further description p. 30, FERNALD Zoologica, N.Y. 27.

Crossocerus (*Hoplocrabro* a subgen., characters p. 177); (*H.*) *angelicus* Kinc. (= *vierecki* Smith, *boulderensis* Rohw., *spinibuccus* Vier.) re-description p. 181 figs., PATE Canad. Ent. 74.

Ectemnius (*Hypocrabro*) *imbutus* Fox (= *ferrugineipes* Rohw.), *novanus* Rohw. from *Hoplocrabro* p. 179, PATE Canad. Ent. 74.

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Tracheliodes perarmatus, *senex* status discussed p. 389, PATE Rev. Ent. Rio de J. 13.—*T.* revision pp. 222–244; *amu* sp. n. New Mexico p. 235 figs., PATE Lloydia 5.

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List of and notes on Indian Bethyloidea, PRUTHI & MANI Mem. Indian Mus. 13 pp. 423–430, 435–440, 7 figs.

Dryinid larva and larval case, ARLÉ Bol. Mus. nac. Rio de J. 11 1935 no. 3–4 pp. 51, 53–55 figs.

Bethylus distigma early stages p. 163, CHATTERJEE Ind. J. Ent. 3 1941.

Chelogyne brasiliensis sp. n. Brazil p. 48 figs., ARLÉ Bol. Mus. nac. Rio de J. 11 1935 no. 3–4.

Goniozus gallicola sp. n. Oregon p. 168, FOUTS Proc. ent. Soc. Wash. 44.—*G. indicus* Ashm. (Indian Mus. Notes 6 1903 p. 2) first author not Muesebeck (Proc. ent. Soc. Wash. 42 1940 p. 121), PRUTHI & MANI Mem. Indian Mus. 13.

Prodryinus affinis sp. n. Brazil p. 44 figs., ARLÉ Bol. Mus. nac. Rio de J. 11 1935 no. 3–4.

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Tiphia shastensis sp. n. California p. 139; key to allied spp. p. 142, KROMBEIN Pan-Pacif. Ent. 18.

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Dasylabris egregia notes p. 185, DEL JUNCO Y REYES Bol. Soc. esp. H. n. 39 1940.—*D. iberica* sp. n. Spain p. 88, GINER MARÍ Eos 18.

Hoplocrates revision of S. American spp. pp. 341-414, key p. 350; *maculiceps* p. 357, *bellica* p. 358, *scutellaris* p. 363, *lingulatus* p. 367, *dryope* p. 373, *amoena* p. 375, *oblectanea* p. 390, *albifrons* p. 392, *nigricans* p. 405 Brazil, *gratiosa* p. 365, *illex* p. 396, *dentigula* p. 398, *decumata* p. 403 Bolivia, *capitulata* Fr. Guiana p. 370, *elecebra* Cayenne p. 372, *pompalis* p. 378, *penthesilea* p. 383, *protracta* p. 401 Venezuela, *munita* Amazon River p. 380, *tartarina* p. 385, *ferocula* p. 410 Colombia, *admiranda* Ecuador p. 388, *buccata* p. 394, *spinigula* p. 408 Peru spp. n.; *miles* var. n. *atriceps* p. 360; *specularis* var. n. *subtilis* p. 362 Brazil; *monacha* var. n. *rubella* Bolivia p. 377; *mystica* Gerst. p. 356, *smithii* Cress. p. 359, *specularis* Gerst. p. 361, *erythrasis* Gerst. (= *rufoscutellata* Smith) p. 362,

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Hoplotmutilla some spp. see *Hoplocrates*.

Mutilla maculipennis see *Hoplocrates*; *quadridens* see *H. moneta*; *armata* see *H. monacha*.

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Keys to Psammocharids pp. 232, 240, 242, BANKS Occ. Pap. Bishop Mus. 16 1941.

Ageniella leucippe sp. n. Solomon Is. p. 241 fig., BANKS Occ. Pap. Bishop Mus. 16 1941.

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Phthitogomphus gen. n. (= *Paragomphus* Handlirsch 1939 nom. nud. preocc.), type *angulatus* Handl. p. 77, COWLEY t.c.

Proinogomphus gen. n. (Handlirsch 1939 nom. nud.), type *bodei* Handl. p. 76, COWLEY t.c.

Pycnothemis gen. n. (Handlirsch 1939 nom. nud.) type *densa* Handl. p. 72, COWLEY t.c.

Rhabdothemis gen. n. (Handlirsch 1939 nom. nud.), type *strigivena* Handl. p. 71, COWLEY t.c.

Systellothemis gen. n. (Handlirsch 1939 nom. nud.), type *reticulata* Handl., a *Heterophlebiid* p. 69, COWLEY t.c.

Temnostigma gen. n. (Handlirsch 1939 nom. nud.), type *singulare* Handl. p. 72, COWLEY t.c.

Orthoptera and Protorthoptera.

Revision of Locustopsidae, ZEUNER Proc. R. ent. Soc. Lond. (B) **11** pp. 5-15.

Fossil Oedipodinae and Acridinae, ZEUNER Ann. Mag. n. H. (11) **9** pp. 128-134, 304-314, 1 fig.

Brodiana gen. n. p. 13, *cubitalis* sp. n. Lower Lias, England p. 14 fig., ZEUNER Proc. R. ent. Soc. Lond. (B) **11**.

Hemimylacrella gen. n. (type *ramificata* Handl.) p. 117, HANDLIRSCH Foss. Cat. I: Animalia. Pars 16 Ins. palaeozoica 1922.

Locustopsis spectabilis p. 8, *uvarovi* p. 10, *gracilis* p. 11, *constricta* p. 12 spp. n. Lower Lias, England figs., ZEUNER Proc. R. ent. Soc. Lond. (B) **11**.

Oedipoda radobojana sp. n. Lower Miocene, Croatia p. 132, ZEUNER Ann. Mag. n. H. (11) **9**.

Podismopsis gracilis subsp. n. *pleistocenica* Upper Pleistocene, Starunia p. 306, ZEUNER t.c.

Palaeodictyoptera.

Rectineura gen. n., *lineata* sp. n. Br. coal measures p. 281 figs., BOLTON Quart. J. geol. Soc. **90** 1934.

Apterygota.

Fossil Apterygota, EWING Proc. ent. Soc. Wash. **44** pp. 85-87, 1 fig.

ERRATA.

- Vol. liv, 1917, p. 122, col. 2, 12 lines from end, for "*dolli*" read "*bolli*"
- Vol. lix, 1922, p. 329, col. 2, for "*Idiochora*" read "*Idiochroa*"
- Vol. lxi, 1924, p. 149, col. 1, line 29, before "WOLCOTT" insert "MORE in"
- Vol. lxxv, 1928, p. 272, col. 1, transfer *Vinemina* to GEOMETRIDAE
- Vol. lxxi, 1934, p. 394, col. 1, transfer *Alombus* to CHLOROPIDAE
- Vol. lxxi, 1934, p. 482, col. 1, 6 lines from end, for "p. 322" read "p. 332"
- Vol. lxxi, 1934, p. 483, col. 2, after "*Rectineura*" insert "**gen. n.**"
- Vol. lxxii, 1935, p. 326, col. 2, for "*Alucula*" read "*Aucula*"
- Vol. lxxiii, 1936, p. 229, col. 1, 14 lines from end, delete "of subgen." and transfer "*Speonesiotetes* . . p. 235" to SILPHIDAE
- Vol. lxxiii, 1936, p. 407, col. 1, for "*Austrogallia*" read "*Austroagallia*"
- Vol. lxxiii, 1936, p. 415, col. 2, after "*Bussothrips*" insert "**gen. n.**"
- Vol. lxxv, 1938, p. 335, col. 2, transfer "*Copiopteryx*" to SATURNIIDAE
- Vol. lxxv, 1938, p. 392, col. 2, 16 lines from end, for "p. 297" read "p. 296"
- Vol. lxxv, 1938, p. 393, col. 2, line 5, insert "p. 318" before "figs."
- Vol. lxxv, 1938, p. 401, col. 1, for "*Tetralecia*" read "*Tetralicia*"
- Vol. lxxvi, 1939, p. 270, col. 2, for "*Araiorrhynchus*" read "*Araiorhinus*"
- Vol. lxxvi, 1939, p. 343, col. 1, for "*Machaeretis*" read "*Machaeritis*"
- Vol. lxxvii, 1940, p. 104, col. 2, 10 lines from end, for "N.S. Wales" read "Victoria"
- Vol. lxxviii, 1941, p. 9, No. 18 and p. 187, col. 1, 2 and 4 lines from end, for "[? 1941]" read "1940" and for "p. 484" read "p. 486"
- Vol. lxxviii, 1941, p. 11, No. 53 and p. 92, col. 2, 3 lines from end, and p. 93, col. 1, lines 10 and 21, for "ATHERTON, R. F." read "RIEDEL, F. A."
- Vol. lxxviii, 1941, p. 22, col. 1, No. 300, and p. 95, col. 2, line 12, for "Chüan-Chieh, T." read "T'an (Chia-Chieh)."
- Vol. lxxviii, 1941, p. 25, No. 382, for "pp. 7-19" read "pp. 3-19"
- Vol. lxxviii, 1941, p. 43, No. 780, for "1940" read "1941"; delete "[Original paper not seen.]" and after "India" insert "Diptera: Trypetidae, Nachtrag."
- Vol. lxxviii, 1941, p. 51, No. 953, for "pp. 41-44" read "pp. 65-68 (pagination of separate pp. 41-44)"
- Vol. lxxviii, 1941, p. 65, No. 1255, line 3, for "Rev." read "An."
- Vol. lxxviii, 1941, p. 103, col. 2, line 14, for "31" read "21"
- Vol. lxxviii, 1941, p. 125, col. 1, line 17, for "LEPTURIDAE" read "LEPTINIDAE"
- Vol. lxxviii, 1941, p. 128, col. 2, line 24, for "*Duliticola*" read "*Diluticola*"
- Vol. lxxviii, 1941, p. 128, col. 2, line 43, transfer *Maelodrus* to EUCNEMIDAE
- Vol. lxxviii, 1941, p. 149, col. 1, transfer *Notozus* to CHRYSIDIDAE
- Vol. lxxviii, 1941, p. 149, col. 2, for "*Batazonus*" read "*Batozonus*"
- Vol. lxxviii, 1941, p. 157, col. 2, lines 15, 19, for "*Eripterinimorpha*" read "*Eripterimorpha*"
- Vol. lxxviii, 1941, p. 165, col. 1 and p. 166, col. 1, transfer *Ceratinia* and *Pseudo-mechanitis* to DANAIIDAE
- Vol. lxxviii, 1941, p. 165, col. 1, line 19 and p. 166, col. 1, for "*Pyrrhopyga*" read "*Pyrrhogyra*"
- Vol. lxxviii, 1941, p. 167, col. 2, transfer *Ceratrachia* to HESPERIIDAE
- Vol. lxxviii, 1941, p. 171, col. 2, transfer *Leucotmemis* to SYNTOMIDAE

Vol. lxxviii, 1941, p. 172, col. 1, for "*Crysioprora*" read "*Crypsiprora*"

Vol. lxxviii, 1941, p. 173, col. 2, for "*Phreraspis*" read "*Pheraspis*"

Vol. lxxviii, 1941, p. 173, col. 2, for "*Dithadama*" read "*Dithalama*"

Vol. lxxviii, 1941, p. 175, col. 2, 8 lines from end, for DREPANIDAE read EUPTEROTIDAE

Vol. lxxviii, 1941, p. 176, col. 2, for "*Antiterpna*" read "*Antipterna*"

Vol. lxxviii, 1941, p. 176, col. 2, 10 lines from end and p. 179, col. 2, for "*Thalerotrichia*" read "*Thalerotricha*"

Vol. lxxviii, 1941, p. 177, col. 2, p. 178, col. 2, and p. 179, col. 1, transfer *Ezartema*, *Olethreutes* and *Polychrosis* to TORTRICIDAE.

Vol. lxxviii, 1941, p. 178, col. 1, line 10, for "*Oxybelse*" read "*Oxybeles*"

Vol. lxxviii, 1941, p. 199, col. 2, lines 18 and 33, for "*Chrysostomyia*" read "*Chrysostomomyia*"

Vol. lxxviii, 1941, p. 201, col. 1, lines 33 and 36, for "*Anorostomoides*" read "*Anarostomoides*"

Vol. lxxviii, 1941, p. 201, col. 2, lines 24, 31, 37; p. 202, col. 1, 10 lines from end, and p. 203, col. 1, line 28, for "1940" read "1941"

Vol. lxxviii, 1941, p. 210, col. 2, for "*Blasticus*" read "*Biasticus*"

Vol. lxxviii, 1941, p. 221, col. 1, line 16 and col. 2, for "*Furchadlaspis*" read "*Furchadaspis*"

Vol. lxxviii, 1941, p. 224, col. 2, transfer "*Austrogoniodes*" to MALLOPHAGA

Vol. lxxviii, 1941, p. 225, col. 2, and p. 227, col. 1, line 7, for "*Goniocotocanthus*" read "*Goniocotacanthus*"

Vol. lxxviii, 1941, p. 229, col. 2, delete "*Anisopteron brodianum* see *Progonophlebia*"

Vol. lxxviii, 1941, p. 230, col. 2, 10 lines from end, for "Handl. from *Anisopteron*" read "**sp. n.**"

Vol. lxxviii, 1941, p. 231, col. 2, for "*Oxythopsis*" read "*Oxythespis*"

16. AMPHIBIA AND REPTILIA.

ARRANGED BY
MALCOLM A. SMITH.

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1.—Adams, L. The natural history and classification of the Mount Lyell Salamander, *Hydromantes platycephalus*. Univ. Cal. Pub. Zool. **46** 2 1942 pp. 179–204 pls. & text-figs.

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17. AVES

ARRANGED BY

W. L. SCLATER, M.A.

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Full references are given only in the cases of new genera and species. In other cases the numeral in larger Clarendon refers to the List of Titles, where the full reference will be found. The figures in smaller Clarendon refer to the volume number of the full reference.

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18. MAMMALIA.

ARRANGED BY

W. L. SCLATER, M.A.

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Hypermekops gen. n. for genotype *H. olseni* sp. n. L. Miocene Florida. T. E. WHITE Bull. Mus. comp. Zoöl. 92 p. 11. [N.V.].

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†*Catopsalis utahensis* addt. descr. figs. p. 8, GAZIN 367.

†*Ptilodus ferronensis* sp. n. Paleocene Utah GAZIN Proc. U.S. Nat. Mus. 91 p. 10 fig.

†*Taeniolabis* sp. in Paleocene of Utah, figs. p. 8, GAZIN 367.

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†*Megalonyx phalanx* found in Alaska Pleistocene, STOCK 941.

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mal skull with palatine plate reaching facial aspect, MONTAGU 686; A correction of a misleading figure of the sole of the foot, POCKOCK 771; Melanin pigment in brain, ADLER 7.—*G. beringei* structure size and weight of testes, WISLOCKI 1042; A study of the origin of graphic art in Simiidae, HUXLEY 524.

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Early man and his phylogeny in E. Asia, BRODRICK 150.

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†*Australopithecus* notes on structure and affinities, BROOM 154.

†*Homo sapiens* a skull from near Naivasha description and discussion of age and affinities, LEAKEY 605.

†*Paranthropus robustus* bones of the manus, BROOM 153.

†*Pithecanthropus* and human evolution in Java, DE TERRA 967; Affinities of the recently found lower jaw, MONTANDON 689.

†*Sinanthropus pekinensis* of the limb bones, WEIDENREICH 1012.

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